ASSESSMENT OF DETERMINANTS OF COUPLES DECISIONS ON FERTILITY PREFERENCE IN KISHAPU AND MVOMERO DISTRICTS, TANZANIA

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A THESIS SUBMITTED IN FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY OF THE OPEN UNIVERSITY OF TANZANIA

2015

CERTIFICATION

The undersigned certify that they have read and here by recommend for acceptance by the OpenUniversity of Tanzania a thesis titled: *"Assessment of the Determinants of Couples Decisions on Fertility Preference in Kishapu and Mvomero Districts, Tanzania''*in fulfillment of the requirements for the degree of Doctor of Philosophy of the OpenUniversity of Tanzania.

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DECLARATION

I, **Harrieth Godwin Mtae**, the undersigned, do hereby declare that this thesis for the award of Degree of Doctor of Philosophy is my original work and it has not been submitted to any other University for a similar or different award.

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Date

DEDICATION

This piece of work is dedicated to my late mother Dorah Abraham Shaid and my farther Godwin Paul Mtae for making me the person I am today. My husband Said, and my children Nancy and Abraham, this is for you too. My young sister Bertha Godwin Mtae, I lost you when I was in the mid of this work, I will always remember you and may your soul rest in eternal peace. Amen.

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The successful completion of this work was made possible by the joint efforts of a number of institutions, organizations and individuals, whose participation I would like to acknowledge with gratitude.

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ABSTRACT

This study examined the determinants of couple's decisions on fertility preference in Tanzania, particularly in Kishapu and Mvomero districts. It is based in the assumption that factors like social network, communications, educations, employment, decision-making, ownership of property, attitudes towards wife beating, patriarchy, religion and ethnicity may affect couples decisions on the number of children they should have. The study used cross section study design and it involved 586 respondents (293 couples) from Kishapu and Mvomero districts selected using multistage sampling. Data were collected using interviews and focus group discussions and were analyzed using IBM SPSS Version 17. Social network was found to have significant effect on family planning (FP) for both couples and on family size (FS) for men, though the effect was found to depend on the nature of relationship, discussion, encouragement and method used social network member. Communication was observed to have significant impact on contraceptive use and FS based on the type of discussion however frequency and timing of communication matters a lot. Social economic status revealed that, even some formal education have effect on contraceptive use but for impact to be felt on family size the secondary education was found to be important. Ownership of property especially house was found to have significant effect on FS for women and ownership of land for men. Culture was found to influence contraceptive use and family size in different ways. A great association was found between ones religious affiliation and contraceptive use and FS, moreover, high levels of religiousity was associated with large family size. Ethnicity also appeared to have significant association with contraceptive use

and FS especially among Sukuma respondents. This study recommends the need for involvement of men and women of reproductive age in all levels of policy development, programme plans and implementations.

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AIDS	Acquired Immune Deficiency Syndrome
ASRM	American Society for Reproductive Medicine
CPR	Contraceptive Prevalence Rate
CSA	Central Statistical Authority
DHS	Demographic Health Survey
DRCHO	District Reproductive and Child Health Officer
FGD	Focus Group Discussion
FGM	Female Genital Mutilation
FP	Family Planning
HIV	Human Immune-deficiency Virus
ICPD	International Conference on Population and Development
IPPF	International Planned Parenthood Federation
IUD	Intra-Uterine Device
KDHS	Kenya Demographic Health Survey
LAM	Lactation Amenorrhea Method
LMA	Law of Marriage Act
MCH	Maternal and Child Health Clinics
MDGs	Millennium Development Goals
MoH	Ministry of Health
MUCCoBS	Moshi University College of Co-operative and Business Studies
NFPCIP	National Family Planning Coasted Implementation Programme
NFPP	National Family Planning Programme

NGOs	Non Governmental Organizations
NIPS	National Institute of Population Studies
NSGRP	National Strategy for Growth and Reduction of Poverty
PRSP	Poverty Reduction Strategy
RCPRHE	Religious Consultation on Population, Reproductive Health and Ethics
SARDC	Southern African Research and Documentation Center
SPSS	Statistical Package for Social Science
SUA	Sokoine University of Agriculture
TDHS	Tanzania Demographic and Health Survey
TFR	Total Fertility Rate
TGNP	Tanzania Gender Networking Programme
UN	United Nations
UNICEF	The United Nations Children's Fund
URT	United Republic of Tanzania
USAID	The United States Agency for International Development
VEO	Village Executive Officer
WEO	Ward Executive Officer
WHO	World Health Organisation
WIDSAA	Women in Development Southern Africa Awareness

CHAPTER ONE

INTRODUCTION

1.1 Background to the Research Problem

Determinants of couple's decision making on fertility preference are issues of great importance especially in developing countries like Tanzania where fertility rates are considerably high. Individuals and couples have basic human right to fertility preference - that is, to decide freely and responsibly on the number, spacing, sex and timing of their children. This preference refers to the number of children couples have. Hence, fulfilling this right is an important intervention for improving maternal, child and couples health, and for improving the overall well being of the entire families. Nonetheless, there are only a small proportion of women in Africa who want to space or limit their pregnancies and yet are not using any form of family planning (USAID, 2007; Ernest *et al.,* 2011). Demographers and health specialists refer to these women as having an "unmet need" for family planning - a concept that has influenced the development of family planning programs for more than two decades. In Africa, besides this, about 17 percent of all married women would prefer to avoid a pregnancy but are not using any form of family planning (UN, 2008 and Cleland *et al*., 2006).

Tanzania is one of the first countries in Sub-Saharan African countries to establish FP programme in 1959. At present, contraceptive prevalence rate is 34 percent. This means that Tanzania continues to experience high fertility rates especially in the western parts of the country and desire for large family size and unchanging unmet needs for contraception (Agwanda and Amani, 2014). In Tanzania fertility trends

match those of most Sub-Saharan countries (Ezeh *et al*., 2009) because fertility preferences are controlled by traditional norms. Fertility varies substantially by residence, region and education levels. It is suggested that, there is strong association between socio-economic factors, education being one of them and falling fertility rates for educated people as they practice their rights of fertility preference. This is because more highly educated persons frequently use effective contraceptive methods more frequently, have their first child at a later age, space their pregnancies farther apart, and consequently have fewer children than persons with a lower education attainment (Kravdal, 2001; Larsen *et al*., 2003; Marchant *et al*., 2004). In Tanzania, total demand for FP is 59.7 percent of which 25 percent is unmet need and 34 percent is current use (Bradley et al., 2012).

Although Tanzania has invested heavily in health services and in formal education since independence, its fertility rates - however, have stalled to an average number of about six children per woman (Soares, 2007; Garenne *et al*, 2008; UNICE,2008; Ezeh, *et al.*, 2009). Currently in Tanzania, the highest unmet need is among rural dwellers with no education (30%) and (24.6%) of those with primary education (Agwanda and Amani, 2014). According to Hansingo (2012), husbands and wives do not know each other's views about family planning and reproductive health behavior. When couples do not know each other's fertility desires, family planning attitudes or contraceptives preferences, the consequences can include unintended pregnancies and unsafe abortions and hence the need for couples to communicate on various health issues (Biddlecom *et al.*, 2001; Hudson, 2000 and Hollerbach, 2000) as cited by Oladeji (2008).

Furthermore, various studies suggest that social interactions can influence reproductive and contraceptive behavior. This influence can take place through two interrelated processes -sociallearning and social influence (Bongaarts and Watkins, 1996; Montgomery and Casterline, 1996; Kohler, 2001). Social learning refers to the acquisition of information from others; whereassocial influence refers to the power that individuals exercise over each other through authority, deference, and social conformity to pressures (Montgomery and Casterline, 1996).

There is a wealthof research describing prevalence of, and patterns in the use of modern contraceptivemethods in high fertility settings - such as Sub-Saharan Africa, which enhance fertility preference. In these countries the fertility is still high due the role of a host of cultural factors which impede the adoption ofcontraception such as religion and so remain only partially understood among married and unmarried couples.The adoption of contraception is a cultural processthat depends on access to and acceptability of information as wellas contraceptives themselves (Agadjanian 2005). While the access to contraception is likely unrelated toreligion in rural sub-Saharan Africa, the acceptability of contraceptive use is related toone's faith or faith of the community (Yeatman and Trinitapoli, 2008).

One of the central questions in population policy has been the extent of unintended fertility and, correspondingly, the amount of unsatisfied demand for fertility regulation. An estimated 2.9 million unintended pregnancies could be averted over the next decade if the unmet need for contraception were met (URT, 2010). In 2006, unmet need for family planning was added to the fifth Millennium Development Goal (MDGs) as an indicator for tracking progress on improving maternal health

(Bernstain, 2007). This recognition has led demographers to redirect their attention to couples instead of women alone in studies on fertility in sub-Saharan Africa (Avogo and Agadjanian 2008; Bankole and Singh 1998; Takyi and Dodoo, 2005).

However, some studies also showed that there may be covert contraceptive use or non-use by females to achieve their fertility desires when their husband did not agree with their desires (Gipson and Hindin, 2007; Gipson and Hindin 2009). In a study conducted in Ghana it was reported that 25% of married women were currently using a family planning methods without any reference to their spouses' involvement (Ghana Trend Report, 2005).

Many couples in Tanzania are not making the right decisions on fertility preferences - hence leading to high fertility rates. Many researches have explained the association between high fertility rate and low use of contraceptives, high infant mortality rates, under five mortality rates and maternal mortality rates which is the case in Tanzania (Rutstein 2005; DaVanzo, Hale, *et al.* 2007; DaVanzo, Hale, *et al*. 2008; Yeakey, *et al.* 2009; DHS, 2010; Saifuddin, *et al*., 2012).

1.2 Statement of the Research Problem

In Kishapu and Mvomero Districts, much effort has been made to promote fertility preference by using mass media like televisions, radio, news papers, drama and other programmes such as antenatal clinics for pregnant women coupled with encouragement of both men and women to discuss on reproductive health especially child spacing and limitations of child bearing (Rogers *et al.*, 1999; TDHS, 2010). Moreover, couples have been encouraged to involve their spouse to cooperate in

making decisions on the size of their families and share responsibilities for reproductive decision. Inspite of this encouragement many men and women in the two districts of this study are yet to make right decisions on fertility preferences resulting into high fertility rates. Therefore, it is the intention of this study to examine the factors which influence couples' decision on fertility preference in the two districts.

1.3 Objectives of the study

1.3.1 General Objective

The main objective of the study was to assess the determinants of couple's decisions on fertility preference in Tanzania.

1.3.2 Specific Objectives

The specific objectives of this study were:

(i) To examinethe impact ofsocial network on couple's decision on fertility preference

(ii) To assess the influence of communication among couples on fertility preference

(iii) To assess the influence of couple's socio-economic status on couple's decisions on fertility preference and

(iv) To examine the influence of culture on couple's decisions on fertility preference

1.4 Research Hypotheses

1. H_o= Couples decisions on fertility preference is not influenced by social network

   H_1= Couples decisions on fertility preference is influenced by social network

2. H_o= Couples communications on familyplanning does not influence their decisions on fertility preferences

   H_1= couples communications on familyplanning influences their decisions on fertility preferences

3. H_o= Couple's decisions on fertility preferences is not influenced by their socio-economic status

   H_1= Couple's decisions on fertility preferences is influenced by their socio-economic status

4. H_o= Couple's decisions on fertility preferences is not influenced by their culture

   H_1= Couple's decisions on fertility preferences is influenced by their culture

1.5 Significance of the Study

The findings from this study are expected to contribute to the existingbody of knowledge regarding contraceptive use and fertility preference in Tanzania in terms of social, economic and cultural factors.

The reproduction process involves both men and women though many studies conducted in this area focused on men only or women only. This study sought to get information and views on contraceptive use from both men and women given the fact that each one is entitled to his or her own opinion.

The findings shall save as a reference for other demographic researches - not only in Kishapu and Mvomero districts but, also in other parts of Tanzania with similar

social, economic and cultural backgrounds. It is also expected that, generated information will be useful to planners and policy makers in attempting to formulate effective policies that can help in making population projections. In turn, this will informs future planning and development of the nation focusing on factors such as health, education and employment.

At micro level, the finding will assist health planners and other collaborators to formulate appropriate strategies and interventions to improve reproductive and child health care and in turn increase the use of modern contraceptives and so control the population growth, especially in the areas with low contraceptive prevalence and high population growth. In addition, the findings will also provide some indicators and progress towards achievement of the National population policy in attaining its goal, as well as various global and national commitments as reflected in the targets of the millennium development goals, (to attain Millennium Development Goals number 4 - to reduce child mortality by two-thirds from the rate in 1990 and number 5 - to reduce maternal mortality by three-quarters from the rate in 1990), Tanzania Vision 2025, the National Strategy for Growth and Reduction of Poverty (NSGRP), among others.

CHAPTER TWO

LITERATURE REVIEW

2.1 Chapter Overview

This chapter reviews major factors affecting reproductive behavior and fertility preference in Tanzania and other parts of the world. The chapter starts by presenting the definition of various important terms and the conceptual framework of this study. This is followed by the review of various theoretical issues which are related with contraceptive use and fertility preference. The review of empirical literatureis also presented to cover some of the available literatures on the studies related to this one. These include literature on demographic factors, like age and marital status; social network which will cover men and women social network; communication on reproductive matters, adoption of family planning and number of children; couples social economic status which include equity, education and employment as well as cultural influence on fertility preference, which covered matriarchal and patriarchal societies, religion and ethnicity. Lastly, family planning status and trend in Tanzania is presented followed by policies related to fertility rate.

2.2 Definition of Terms

2.2.1 Contraceptive/Family Planning

Contraceptive use involves the use of various devices, drugs, agents, sexual practices, or surgical procedures to prevent conception or impregnation (pregnancy). Contraceptive use goes hand in hand with family planning (FP) which is defined by World Health Organization (WHO) as the strategy to allow individuals and couples to anticipate and attain their desired number of children and the spacing and timing

of their births. It is achieved through use of contraceptive methods (WHO, 2010). Intentional user of long-term or use of permanent methods to prevent pregnancy is termed as contraception.

Contraceptive methods are divided into two categories - modern and traditional methods. Modern methods are contraceptives whose effectiveness in reducing the probability of conception has been clinically proven. These are male sterilization, female sterilization, male condoms, female condoms, injectable hormone-based contraceptives (e.g. Depo Provera), combined oral contraceptive pills (also known as "the pill"), intra-uterine devices (IUD), and hormone-releasing contraceptive implants (e.g. Norplant). These methods can be obtained free of charge or for a fee at the local government clinics, private clinics, hospitals, pharmacies, medicine shops (i.e. a stores where over-the-counter pharmaceutical products are sold without the supervision of a pharmacist), mobile clinics (i.e. a vehicles sponsored by non-profit organizations that comes periodically to a villages to visit patients and distribute medicines), or fromcommunity health officers (Sedgh *et al.*, 2007; Sullivan *et al.*, 2006).

On the contrary, traditional methods are FP strategies whose effectiveness has not been proven in clinical trials. These methods are part of the traditional lore passed on to younger generations by their older female relatives. They include withdrawal, lactation amenorrhea (i.e., prolonged breastfeeding), periodic sex abstinence, and strategies that involve medicinal herbs or water or other items. Both users and clinicians recognize that these methods are sub-optimal in preventing pregnancies, but they are still attractive options in many villages because they do not require

money, traveling, or medical consultation (Sedgh *et al.*, 2007; Sullivan *et al.*, 2006). In this study, traditional methods mentioned are those used locally by couples in an attempt to prevent a woman from getting pregnant but they are not proven scientifically that they can serve the purpose.

2.2.2 Unmet Needs for Family Planning

Unmet need for family planningis defined as the percentage of women of reproductive age, either married or in a union, whohave an unmet need for family planning.Women with unmet need are those who want to stop or delay childbearing but are not using any method of contraception. The standard definition of unmet need for family planning is women who are fecund and sexually active but are not using any method of contraception, and reported not to wanting any more children or wanting to delay the birth of their next child for at least two years. Included are in this category are:

(i) All pregnant women (married or in a union) whose pregnancies were unwanted or mistimed at the time of conception;

(ii) All postpartum amenorrheic women (married or in a union) who are not using family planning and whose last birth was unwanted or mistimed;

(iii) All fecund women (married or in a union) who are neither pregnant nor postpartumamenorrheic, and who either do not want any more children (want to limit family size), or who wish to postpone the birth of a child for at least two years or do not know when or if they want another child (want to space births), but are not using any contraceptive method (Bradley et al., 2012).

Unmet need for family planning occurs when a woman wants to postpone her next pregnancy or stop having children altogether but, for whatever reason, is not using contraception. It is a statistical measure that calculates how many sexually active women say they want to stop childbearing or delay their next birth by at least two years but, are not using any method of contraception, either modern or traditional (Levine *et al.,* 2006). To be fit in the standard definition of unmet need, a woman must be sexually active and able to conceive (Lori Ashford, 2003; Outlook, 2008). Pregnant or amenorrheic women are also considered to have an unmet need if their current or most recent pregnancy was unwanted or mistimed and they were not using any method of family planning (Outlook, 2008) and according to USAID and DHS (2012), unmet need for family planning is defined as the percentage of women who do not want to become pregnant but are not using contraception.

2.2.3 Contraceptive Prevalence Rates (CPR)

Contraceptive prevalence is the percentage of women who are currently using, or whose sexual partner is currently using, at least one method of contraception, regardless of the method used. It is usually reported for married or in union women aged 15 to 49 (UN, 2011).

According to WHO (2006), contraceptive prevalence rate is the proportion of women of reproductive age who are using (or whose partner is using) a contraceptive method at a given point in time.

However, UN (2007) defined CPR asthe percent of women of reproductive age (15-49 yrs) using any method of contraception at a given point in time. It is usually

calculated for married women of reproductive age, but sometimes for other base population, such as all women of reproductive age at risk of pregnancy. The standard indicator is the percentage currently using or whose partner is using any method of contraception among married (or in a stable union) women aged 15-49 or 15-44. In this context, the married group usually includes those in consensual or common-law unions in societies where such unions are common. Contraceptive prevalence is alsofrequently reportedfor all women of reproductive age at risk ofpregnancy, and statistics are sometimes presented for men instead of, or in addition to women.

2.3 Conceptual Framework

The conceptual framework of this study is based on the assumption that socio-economic and cultural factors contribute to the couple's decision on contraceptive use and fertility preference. It is modified from Bongaarts and Potter (1983) as detailed in Figure 1.1. This study intends to find out the determinants of couples' decision on fertility preference. Decision making on fertility preference is the dependent variable which is expected to be influenced by background variables (age, marital status and residence), underlying variables (social networks which include individual men and women networks, couples socio-economic status that include equity-decision making, property ownership, wife beating, education and employment, cultural influence including patriarchal, matriarchal, religion and ethnicity).

Davis and Blake were the first to present their fertility framework in 1956, and listed eleven intermediate variables through which any factors such as biological, social,

psychological or cultural must operate upon individual fertility (Tuladhar, 1989). These variables were age into sexual union, permanent celibacy, contraception, sterilization, time between unstable unions, post-widowhood celibacy, foetal mortality from voluntary causes, and voluntary abstinence. Others are foetal involuntary mortality, involuntary abstinence, and frequency of coitus and inventory sterility.

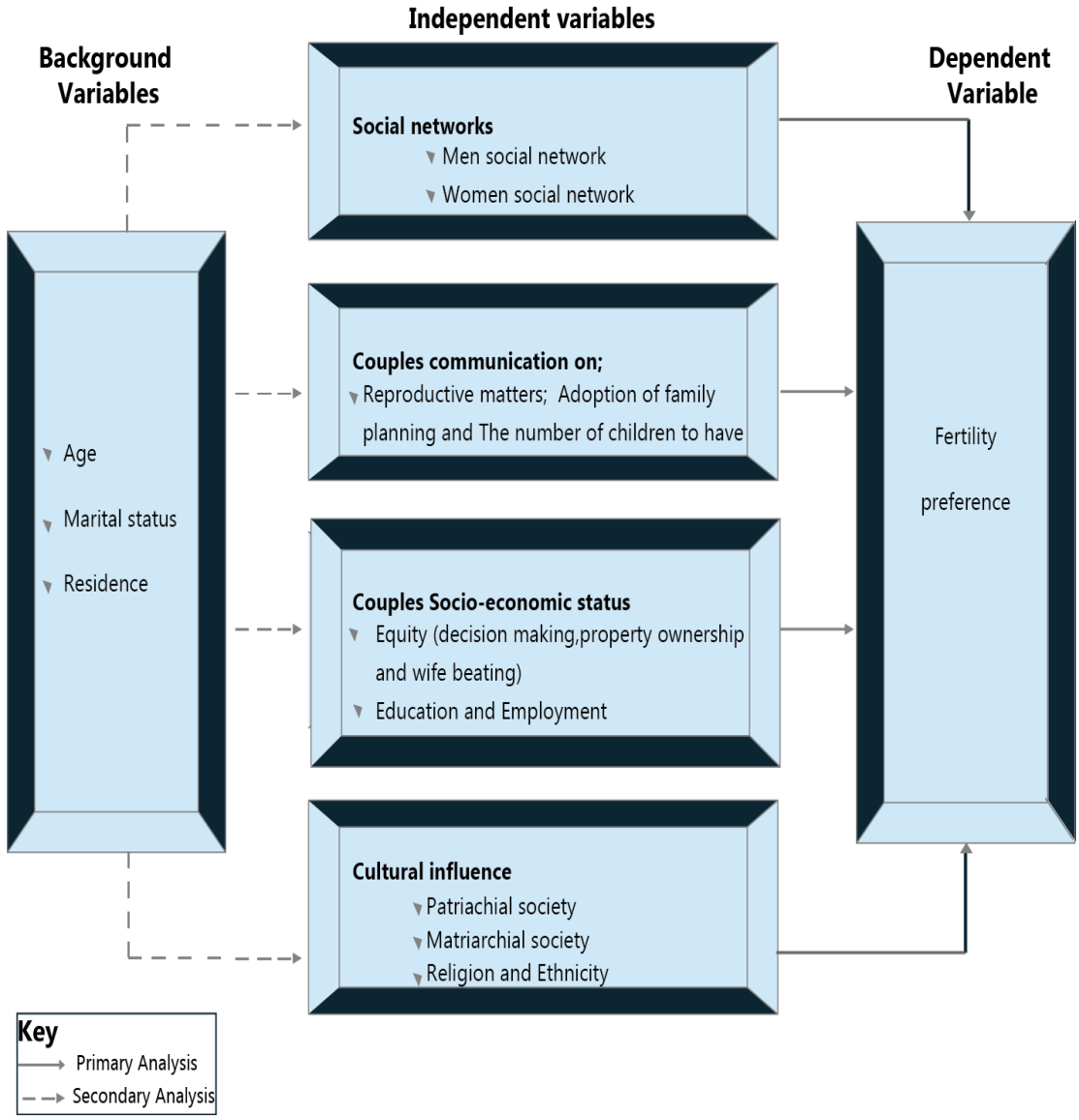


Figure 2.1: Conceptual Framework of the Determinants of Couple's Decision on Fertility Preference

Source: Modified from Bongaarts and Potter (1983)

According to Bongaarts and Potter (1983), proximate variables (intermediate variables) were marriage, contraception, induced abortion, postpartum infecundability, natural fecundability, spontaneous intrauterine mortality and permanent sterility. In this study the proximate variables are marriage and contraceptive use. Some of the proximate variables like induced abortion, postpartum infecundability, natural fecundability, spontaneous intrauterine mortality and permanent sterility were not included as they are more biological and they require medical approach and hence special expertise. These variables can affect positively or negatively the fertility of individuals in the society.

2.4 Theoretical Issues in Reproductive Behaviour

2.4.1 The Demographic Transition Theory

Thompson's (1929) Demographic Transition Theory focuses on the importance of evaluating the fertility decision making between men and women in understanding a country's fertility transition. Fertility transition is generated by changing trends in the economics of having children and also the increasing ability of women to determine their own fertility (Caldwell, 1982; McDonald, 2000; Bongaarts, 2002). The Demographic Transition Model explains the transformation of countries from having high birth and death rates to low birth and death rates in four stages **(**Thompson, 1929).

Fertility Transition Theory assumes that a country will move from a pre-industrial (agricultural) economic base to an urban, industrial one, with a corresponding decrease in family size and population growth. The slowing of population growth

theoretically results from better standards of living, improvements in health care, education (especially for women), sanitation, and other public services. Although this four-stage pattern has been repeated in other places besides Europe, there are local variations, sometimes significant, as the path of development is everywhere different and by no means inexorable.

For example, many of the least developed countries still retain the high birth rates characteristic of Stage 2 the so called "mortality transition" phase where death rates tends to drop due to improved health of the population, including infants (Fig.2.2). Many countries such as China, Brazil and Thailand have passed through very quickly due to fast social and economic change. Also, parts of Europe, Russia and Japan may be entering a new, fifth stage, where birth rates are below death rates, and the population ages and begins to decline (Barma, 2013).

Fertility Transition Theory is an idealized picture of population change in these countries. This generalization that applies to these countries may not accurately describe all individual cases. Apart from that, it does not provide guidelines for how long it takes for a country to get from Stage 1 to Stage 3. Demographic transition theory shows that in the past, developed countries began transitioning in the 18th century and continues today. Today the less developed countries began later and are still in the midst of earlier stages. Western European countries took centuries to develop while rapidly developing countries like Asia are transforming in decades (Barma, 2013).

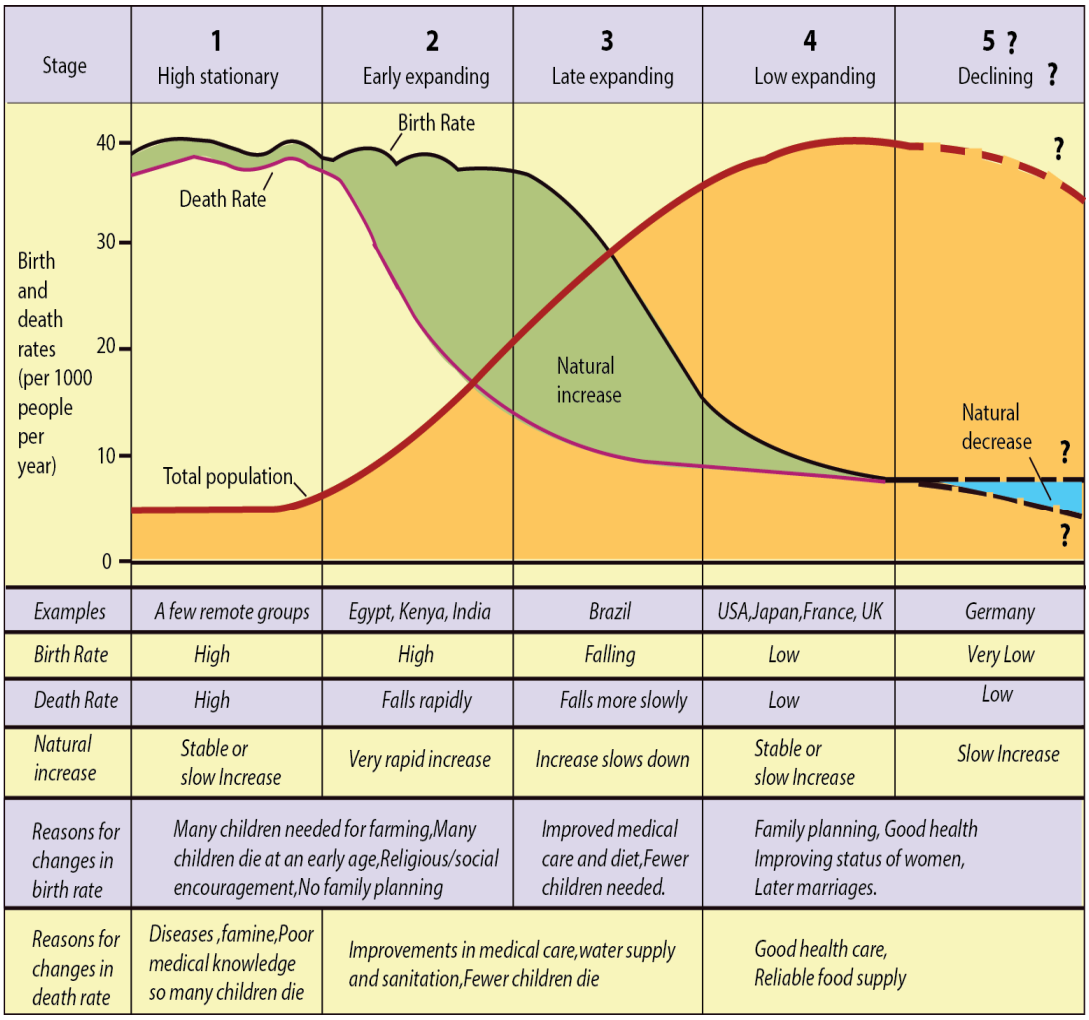


Figure 2.2: Summary of the Demographic Transition Mode by Warren Thompson (1929)

2.4.1.1 Weakness

There are local variations as the path of development varies a lot. Some countries pass very fast and others very slowly depending on how fast social and economic changes of the particular country are. For example, China, Brazil, and Thailand changed very fast but most of least developing countries - including Tanzania, are in stage two. Parts of Europe, Russia and Japan may be entering a fifth stage where birth rates are below death rates (population ages and begin to drop). So it does not say how long it takes from one stage to another.

2.4.2 Gender Equality Theory

Gender Equality Theory in relation to fertility argues that very low fertility is the result of incoherence in the levels of gender equality in individually oriented social institutions and family oriented social institutions.

In advanced economies today, women are able to compete as equals in the individuallyoriented institutions of education and market employment. However, they face a dilemma in family oriented institutions - particularly as reflected in their role within the family; constrain their capacity to fulfilling their aspirations as individuals. Some level of compromise between these competing aspirations is inevitable in almost all cases, but where the level of compromise is severe, some women will opt to eschew the family role rather than the individual role;that is, they will not form a permanent relationship or they will have no children or fewer children than they had intended and some will opt to fulfill the family role first. Accordingly, countries that reducethe level of compromise through institutional approaches that support the combination of work and family will have higher fertility than those that leave women with stark choices between work and family (McDonald 2000a, 2000b, 2006).

However, several scholars such as McDonald (2000, and DeRose,*et al.*,(2002), have observed that if there are equal rights for both men and women within the famil -, especially relating to reproductive or fertility rights, the fertility rates can be decreased to low levels without major changes in women's lives outside the family. Moreover, Dorius and Firebaugh, (2010) stated that populations grow faster in

countries where there is great gender inequality (The differences in the status, power and prestige women and men have in groups, collectivities and societies).

It is observed that the transition from very high fertility to replacement level fertility has been associated with a gradual increase in gender equity primarily within the family itself. In contrast, further movement to very low fertility is associated with a rapid shift toward high levels of gender equity in individual institutions such as education and market employment, in combination with persistent high levels of gender equity within the family and in family-oriented institutions (McDonald, 2000).

2.4.2.1 Weakness

Men and women can differ in any number of domains, so gender inequality intersects other types of inequality (educational, economic, political, and so on).There is little doubt that traditional, deeply conservative attitudes regarding the role of women have made their integration into the world of public decision making extremely difficult. A pattern of declining gender inequality has appeared in all nations with modern economies and political structures, but the timing, rate, and form of specific changes have varied considerably (Dorius and Firebaugh, 2010). All these are not well considered as it focuses on the changes within the family.

2.4.3 Social Network Theory

Social Network Theory seeks to explain changes in a society on how it develops, what factors facilitate and inhibit it, and what results from it (Lindsay, 2011). It was developed by Barnes in 1950's and further developed in 1990's (Barnes, 1954;

Granovetter, 1973 and Kadushin, 2004). Social Network Theory views social relationships in terms of nodes and ties. Nodes are the individual actors within the networks, and ties are the relationships between the actors (Scrupski, 2007). There can be many kinds of ties between the nodes. In its most simple form, a social network is a map of all of the relevant ties between the nodes being studied (Figure 2.4). The network can also be used to determine the social capital of individual actors. These concepts are often displayed in a social network diagram, where nodes are the points and ties are the lines (Lindsay, 2011).

According to (Deji, 2011), the shape of a social network helps to determine a network's usefulness to its individuals. Smaller, tighter networks can be less useful to their members than networks with lots of loose connections (weak ties) to individuals outside the main network. More open networks, with many weak ties and social connections, are more likely to introduce new ideas and opportunities to their members than closed networks with many redundant ties.

In other words, a group of friends who only do things with each other already share the same knowledge and opportunities. A group of individuals with connections to other social worlds is likely to have access to a wider range of information. It is better for individual success to have connections to a variety of networks rather than many connections within a single network. Theory of social network recognizes that individuals interact, learn from and get information from other people. It is expected that discussion on family planning matters among social network members can have influence on each other. It is easy for non user of contraceptives to be influenced

with users and so to increase adoption rate, and this also can have influence on the issues related to communication on reproductive matters as well as family size.

Wade (2005) believe that, the power of social network theory stems from its difference from traditional sociological studies, which assume that it is the attributes of individual actors, whether they are friendly or unfriendly, smart or dumb, etc. that matter. Social network theory produces an alternate view, where the attributes of individuals are less important than their relationships and ties with other actors within the network. This approach has turned out to be useful for explaining many real world phenomena, but leaves less room for individual, the ability for individuals to influence their success; so much of it rests within the structure of their network.

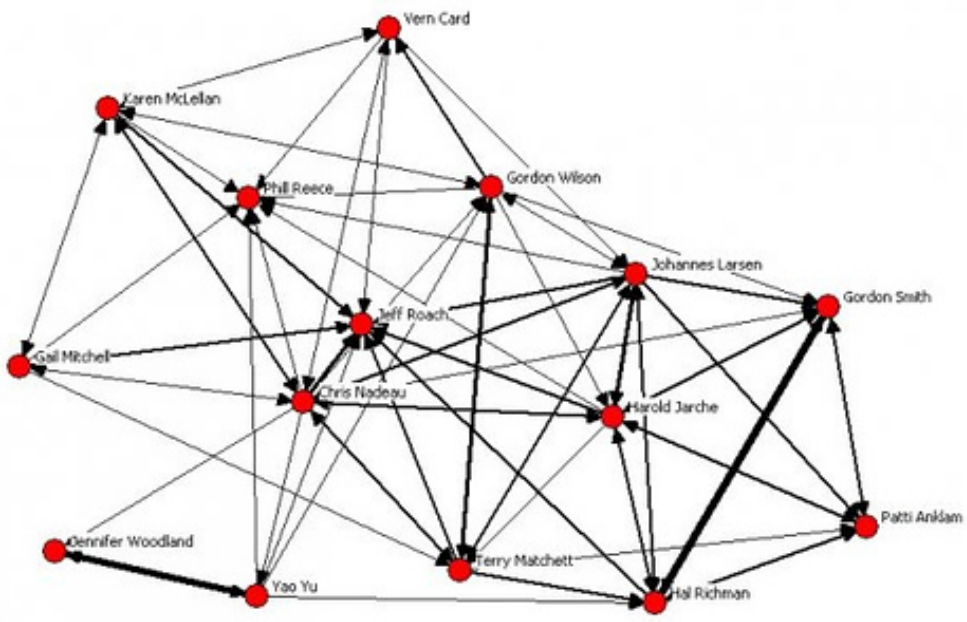


Figure 2.3: Social Network Diagram

Source: Scrupski (2007)

Note: Round balls are people and the lines are social relationship between them.

2.4.3.1 Weakness

The theory focuses mainly on the social networks as the determinants of interactions and influence behavior. However, little is focused on individual agency, that is, individuals' ability to influence their own behavior.

2.4.4 Theory of Planned Behavior (Decision Making Theory)

The Theory of Planned Behaviour by Ajzen (1991) has been applied in the domain of fertility decision-making (Billari et al. 2009; Dommermuth *et al.* 2011). It studies intentions as an immediate forerunner of the corresponding behaviour, and views intentions as beingformulated under the immediate influence of three groups of factors: (a) personal positive and negative attitudes towards the behaviour, i.e., having a child; (b) subjective norms, i.e.,perceived social pressure to engage or not to engage in the behaviour; and (c) perceived behavioural control, i.e., the ability to perform the behaviour, which may depend, for example, on the availability of housing, income, or other resources. The partner's intentions are not explicitly considered in the theory, but it may be implicitly assumed that the perception of a disagreement with the partner may influence an individual's normative beliefs. An individual who wants to have another child, and who perceives that his/her partner does not share this wish, is likely to form the belief that the partner does not want her/him to have another child.

This perception may influence the respondent's own fertility intentions. Ajzen further clarified that, the close link between intentions and subsequent behaviour holds true only if the behaviour is specified in all of its four components: namely, the

target, the action, the context, and the time (Ajzen 2010). In the field of fertility, the target is a child, the action is giving birth, the context is the couple, and the time could be a short-term horizon, which may make the intentions more realistic. Consistent empirical evidence has been collected on the crucial importance of the partner's context for the construction of pregnancy intentions (Barret and Wellings 2002; Zabin et al. 2000).

2.4.4.1 Weakness

Although it can be adapted to incorporate the partner's dimension, the theory of planned behaviour does not explicitly consider the complexity of the dyadic nature of reproduction (Philipov 2011), nor does it describe the disagreement effects of a couple's decisional conflicts (Miller 2011a).

2.5 Empirical Findings on Determinants of Couples Decision on Fertility Preference

2.5.1 Demographic Factors

2.5.1.1 Age Influence on Fertility Preference

Large spousal age gap is correlated with high fertility level and it is often argued that young wives are pressured by their older husbands to produce more children against their own will. It is reported that young women and especially those in arranged marriages have less decision making within marriage (Haberland, 2003). Women's bargaining power matters a lot when they prefer more children e.g. when they are much younger than their husbands. If the age gap is small, the conflict of interest tends to be small (Tao, 2009).

The pattern of marriage in which the age gap between spouses favors the husband is an important indicator to measure the status and position of women in the society. This means that he is more dominant on family decisions and increases his different socio-economic and demographic dominance as a result of higher knowledge and experience because of the gender and age difference (Haddad, 2012). A study conducted in India by Das *et al.*, (2011) found out that age difference between spouses influenced fertility through at least three mechanisms. First, there is evidence that fecundability varies slightly with age of the man, and thus the age difference will affect marital fertility. The age difference is also positively associated with the risk of dissolution of marriage through widowhood before the end of a woman's reproductive years.

Finally, more substantial but less direct effect of the age difference on fertility and on other variables as well may come about through its influence on relations between the spouses and the resulting impact on variables such as marital stability, marital satisfaction, preference for family size and contraceptive use. It is generally observed that a large age gap between the sexes is a necessary mechanism for giving husband sufficient dominance to resist their wives sexual demand.

Age gap between spouses decrease gradually as the status of the women increase and so the improvement of her statues in the society, and as these gaps increase between the spouses the lower the women status is, and her status in society is marginalized (Haddad, 2012). In this regard, many scholars in Jordan noted the need to take into account the importance of women education. Education helped to raise and strengthen women social roles and helped them to exceed those traditional roles that

were surrounding them. Higher education of the women contributed to the probability for women to participate in the labour market and get regular material return, which in turn helped in increasing their chances of marriage in late age, and reduce their material dependency to the husband. It also helped to strengthen their prestige and independence and raise their status both within their family or society. Thus becoming freer from their traditional roles and exercise their rights especially with regard to her right to choose the time and appropriate age at marriage. It seems that those factors combined narrowed the age gap between spouses (Haddad, 2012). Higher ages and educational attainment of husbands compared to their wives have also been shown to affect reproductive preferences and behaviour (Gebreselassie and Mishra, 2007).

In Kenya Khasakhala, (2011) reported that the subgroups with low fertility (below the national average) were those where age and marriage and contraceptive use have played a role in their fertility levels. This was mainly among the Kikuyu, Embu and Meru, hence the usual description of Kenya fertility transition being influenced by increases in age at marriage and contraceptive use may be applicable to these ethnic groups. This is consistent with findings from a number of studies in Kenya that have attributed to the decline in fertility to be as a result of an increase in age at first marriage for the majority of the ethnic groups (Blacker *et al*, 2005; Westoff and Cross, 2005).

Female gender mutilation (FGM) is a cultural and traditional practice that is deeply entrenched in some communities. It is believed that if a woman or girl has not gone through the practice of FGM she cannot get married. Hence in some of these

communities once a girl has been circumcised she has to get married regardless of her age (UNICEF, 2008). Early marriage of course signals early child bearing which is likely to influence fertility levels (Khasakhala, 2011). This is consistent with a study conducted in Pakistan which reported that most of married women in Pakistan have given birth to one child by the age of 20, often within the first year of marriage (NIPS, 2001).

2.5.1.2 Marital Status

Marriage is the primary indication of the regular exposure of a couple to the risk of pregnancy and therefore it is important for the understanding of fertility. The term "married" refers to legal or formal marriage, while "living together" designates an informal union in which a man and a woman live together, even if a formal civil or religious ceremony has not occurred (TDHS, 2005). The other cultural factor which contributes to high fertility rates in Sub Saharan Africa countries is polygamy. The pressure to have more than one wife leads older men to recruit young girls into marriage, thereby increasing the likelihood of women marrying polygamously, to be withdrawn from school and to marry at an early age (Makinwa-Adebusoye, 2001).

2.5.1.3 Place of Residence

Typically, urban residence is accompanied by greater access to resources such as the media and education, which expose people to new ideas. Thus, couples living in urban areas would be expected to show more agreement on limiting family size than their rural counterparts, however, it shows that spousal agreement on fertility preferences does not vary substantially by residence in most of the countries.

However, studies in Kenya and Malawi showed a higher proportion of urban couples in agreement with the intention to have another child compared with their rural counterparts (Gebreselassie, 2008). These results are consistent with the findings of a study carried out by Anyara and Hinde, (2006) which analysed regional fertility patterns in Kenya. The findings showed that fertility was lowest in urban areas and in central province represented by Kiambu, Murang, Nyeri, Kirinyaga and Nyandarua districts and parts of eastern province represented by Embu and Meru (KDHS, 2003) as cited by Khasakhala (2011).

Teller and Gebreselassie, (2009) reported that *t*he demographic transition from high to low fertility in rural areas, usually associated with socio-economic change, has lagged far behind urban areas in most of sub-Saharan Africa. In Ethiopia, the lag is striking. The total fertility rate (TFR) has fallen below replacement level (2.1 children per woman) in the capital Addis Ababa, but is 3.5 children per woman in the towns, and remains above 6 children per women in rural areas where 84 percent of the population resides (CSA, 2001).

2.5.2 Couples Social Networks

2.5.2.1 Men and Women Social Network

Family, friends and neighbors are examples of typical social networks. Others include women's groups, political, church or youth associations, mutual aid and credit groups and marketing associations. Some experts believe communication through these social networks can influence decisions to initiate contraception as much as media campaigns or information provided directly to clients by family

planning programs by spreading information and by influencing behavior (Best, 1999). Many individuals feel uncertain about the health, social and economic consequences of using modern contraceptives and this uncertainty often leads people to discuss matters with their peers, to seek more information or just to be reassured about decisions to begin using contraception (Valente, 2002).

In Ghanaian societies, there are social norms prescribing what the acceptable family size should be and everyday conversations within various social groups can play an important role in a person's decision to begin contraception. People experience social pressure to have children at parities below the normative family size threshold. Likewise, there is pressure to limit births at or above the normative family size (Kodzi and Johnson, 2009). Traditionally, reproductive decision making within the family rests not only with the married couple, but also with other members of their extended family and lineage members like mother in law and other older women related to the husband (Nukunya, 1992 as cited by Akafuah and Sossou, 2008).

A study conducted in Ghana by Akofua and Sossou (2008), reported that thirteen percent of women from rural and urban areas mentioned churches, their wives, friends and neighbors as sources of their knowledge about family planning services. It is evident that decisions to use family planning could also be initiated by significant others including spouse's relatives, friends and neighbors. In India (Rustagi *et al.*, 2010) reported that participants were more inclined to pressure from family members in having more children. In this regard social influence points at the importance of authority and social conformity pressures that exist in some societies

which in turn maintain existing social norms, but constrains innovative behavior (such as anti-natalist tendencies). However, as new and attractive ideas emerge about the cost and benefits of fewer children, this conservative constrain imposed by social influence disappears and personal networks become more diverse and heterogeneous (Montgomery *et al.*, 2001; Kohler *et al.*, 2001).

Literature shows that decisions regarding fertility and childbearing are largely the domain of older female relatives. A study in Pakistan showed that women's use of antenatal care is decided in a complex interplay of gender and age hierarchies (Mumtaz, 2007). Decisions related to antenatal care lie with authorities such as the husband and the mother-in-law; thus, the well being of the woman lies in her relationship to these key family members. Those women who were allowed to participate in decision making in their parental home tend to carry such attitude with them into their new homes after marriage (Hamid *et al*., 2011).

2.5.3 Couples Communication on Reproductive Matters

2.5.3.1 Communication on Adoption of Family Planning

Since marital fertility involves participation of the wife and husband who may differ in their reproductive goals (in terms of number and sex composition of children, timing of having the children), successful planning and decision making about fertility size and use of contraceptives require effective communication of both marital partners (Feyisetan, 2000; Oyediran, 2002). Decision making regarding fertility and family planning usually involves a complex process of negotiation by couples.

According to Oyediran and Isiugo-Abanihe (2002), decisions may be influenced by the attitudes and intentions of one or both spouses. However, communication and negotiation on reproductive health matters in the African context are often strongly influenced by the norms of society. Norms that subordinate women's role in decision-making and often discourage women from acting to promote their own health needs (Rakhshani, *et al.,* 2005).

A study conducted in Morogoro Municipality in Tanzaniaby Mtae (2012) on married women, showed that only a quarter (25.2%) of respondents reported to discuss issues related to reproductive matters. Current contraceptive use was found to be high (85.3%) indicating that even those who were not communicating about reproductive matters were also using contraceptives but, covertly. An assumption is that communication improves family planning, but the reverse could also be true (Sharan, 2002). In Uganda married men and women involved in sexual relationships may negotiate about reproductive health matters, however, their behaviour were strongly influenced by the norms of society and women often accused their husbands of not being supportive of their family planning need (Rakhshani, *et al*., 2005).

Inter-spousal communication has been recognized as a key factor for adoption and sustained use of family planning, because it allows couples to discuss what might appear unclear and exchange information that may change strongly held beliefs (Bawah, 2002; Feyisetan, 2000 and Klomegah, 2006, as cited by Hamid *et al*., 2011*).* Young women - and especially those in arranged marriages, have less decision making within marriage (Haberland, 2003).

In traditional cultures, married women do not feel free to talk about contraceptive methods with their husbands, as in many communities discussions about sexual matters are a taboo for men as well as for women and couples may be afraid to raise the topic of contraception, especially at the beginning of marriage. In these cultures, the dominant expectation of newly married woman is that through marriage, they become sexually available to their husbands and bear children, preferably sons (Winkvist, 2000). The social pressure to conform remains powerful especially for less educated women belonging to poor families (Hamid. *et al.*, 2011).

In a multi-country study conducted by Do and Kurimoto (2012), they reported that difficulties in spousal communication have been associated with covert contraceptive use among women, they also found out that husband's disapproval was a common reason for married women in Ghana to not use a method for fear that they would lose his affection. In Uganda, men's disapproval of family planning was cited as a reason for not using contraceptives by some women (Khan *et al*., 2008). Whilst in Namibia, where studies on family planning and fertility are limited, the study found that approval of family planning by both spouses was significantly associated with women's use of any modern method (Gebreselassie, 2007).

2.5.3.2 Communication on the Number of Children to Have

Since marital fertility involves participation of the wife and husband who may differ in their reproductive goals (in terms of number and timing of having the children), successful planning and decision making about fertility size and use of contraceptives require effective communication of both marital partners (Feyisetan, 2000; Oyediran, 2002; Oyediran, Isiugo-Abanihe, 2002).

According to Mahmood and Ringheim (1998), one would expect greater agreement in fertility and family planning attitudes between spouses in relatively modern societies. This could be because with more widespread schooling, increased opportunities for wage work, and equality of gender relations in these societies, women and men are likely to have similar reproductive interests. Women are likely to desire small families due to their own sources of support and status besides children, and are less likely to bear the unique cost of childbearing and health risks, while men may want fewer children due to the disproportionate economic and social advantages accruing to them. Additionally, modern social and economic conditions are likely to promote husband-wife interaction and communication resulting in greater similarity in their fertility attitudes and behaviour. Previous studies show that men and women who discuss family planning are more likely to use contraception effectively and have fewer children (Lasee and Becker, 1997; DeSilva, 1994). In some cultural settings where direct spousal communication is not an acceptable norm, partners may communicate their reproductive desires or concerns through nonverbal or indirect means if they need to do so at all (Islam et al., 2010). This is seen in Uganda where most reproductive health related communication between men and women were expressed through indirect hints, suggestions and even by talking to peers or relatives in the hope that they would convey the information to the sexual partner (Drennan, 1998) as cited by Islam *et al.*, (2010).

2.5.4 Couples' Socio-Economic Status

2.5.4.1 Gender Equity

Gender equity is referred to as fairness and justice in the distribution of benefits and responsibilities. It is equal opportunity, equal treatment before the law and equal

access to and control over resources and social services. For the smooth running of a family, it is very important that equal status and equal power should be given to the basic constituents of family, i.e., man and woman so that they can rear up their children in a better way, and solve their day to day problems for achieving their desired goals.

Men's position as head of the household was also described in terms of dominance in decision-making, e.g. ...in charge in each and every decision (Schuler, Rottach, and Peninah, 2009). Decisions about contraceptive use and childbearing may be compounded by unequal power relations, especially in more patriarchal societies (Blanc, 2001 and Grady *et al.*, 2007).

Research comparing husbands' and wives' fertility preferences indicate that marital partners are separate actors whose reproductive preferences are not always congruent (Short and Kiros 2002; Casterline *et al.*, 2001; as cited by Bauer and Kneip, 2012). When there is agreement on preferences, it may be based on discussion leading to agreement, coincidentally similar preferences, or projection of own preferences on partner's preferences (Bauer and Kneip, 2011). It is reported by Jan and Akhtar (2008) that women possess low decision-making power in their families given their accorded low status.

According to the 2004–05 TDHS, there is a strong correlation between status of women and ideal family size and family planning use. For example, only about 15 percent of women who have no say in household decisions use a modern method of family planning while 25 percent of women who have power in decision making use a modern method.

Oyediran *et al*. (2006) found out that significant proportions of study participants in Nigeria reported couple communication on reproductive health issues and concluded that this was a sign of an emerging egalitarian society where equity and respect are becoming norms. However, in a study by Schuler, Rottach, and Peninah (2009) it was reported that, while nearly all men and women discussed family planning, gender inequity was still evident in family planning decision-making, where the final decision was left to the man. The findings suggest that couple communication alone is not enough to determine that relationships are equitable; equitable discussions and decision-making might be more meaningful indicators. It implies that the balance of power in sexual relationships had an influence on the use of health services, which in turn could be linked to reproductive health outcomes (Blanc, 2001). A few studies have examined other dimensions of women's empowerment, including decision making regarding household economy and family size, whether women need permission to go out, coercion or control of women (Akafuah and Sossou, 2008).

A study conducted by Do and Kurimoto in 2012 in four countries including Ghana, Namibia, Uganda, Zambia using DHS conducted after 2006 reported that, it is plausible that some women feel empowered because contraceptive use gives them a sense of being capable of controlling their fertility and in fact, it is possible that the use of female methods may result in increased perceived empowerment among these users; women could use female methods without any discussion with or involvement of their partners (Do and Kurimoto, 2012). Decisions about contraceptive use and childbearing may be compounded by a woman supported by a social network of friends but, still she may not use a contraceptive method if her husband does not

approve due to unequal power relations, especially in more patriarchal societies (Blanc, 2001 and Grady *et al*., 2007; Susu *et al*., 1996).

In areas where wives' decision making is limited, family planning is not widespread, and there are differences in husbands' and wives' fertility preferences, as well as reports of substantial clandestine use of contraception (Biddlecom, 1998; Bawah, 1999; Castle, 1999; Fapohunda, 1999 and Alio, 2009). However, in a study by Schuler, *et al.,* (2009) it was reported that while nearly all men and women discussed family planning, gender inequity was still evident in family planning decision making, where the final decision was left to the man.

Research has consistently demonstrated that a woman is more likely to be abused by an intimate partner than by any other person. Many negative health consequences to the victims have been associated with domestic violence against women (Deop, *et al.*, 2006). A study from Nepal suggests that women's empowerment and spousal violence appear to have important implications for the health of women and their children (Tuladhar, *et al.,* 2013).

Domestic violence, besides its serious long-term physical and mental health consequences, it has also negative reproductive health outcomes, including unwanted pregnancy (Pallitto and O'Campo, 2004), induced abortions (Kaye, *et al.,* 2006), miscarriage (Kaye, 2006), and non-use or discontinuation of contraception (McCarraher, *et al.,* 2005; Stephenson, *et al.,* 2008; Stephenson, *et al.,* 2006; Williams, *et al.,* 2008) are of significant concern for many women. A survey conducted in Bangladesh in 2004 based on a nationally representative sample

revealed that three in four Bangladeshi women had experienced violence from their husbands (Silverman, *et al.*, 2007). Other studies reported a prevalence of domestic violence between 40% and 70% of married Bangladeshi women (Mason and Smith, 2000; Al Riyami, *et al.*, 2004).

2.5.4.2 Educational Influences on Fertility Preference

Education is the key determinant of the life style and status an individual enjoys in the society. Studies have consistently shown that education attainment has a strong effect on reproductive behavior, contraceptive use, fertility, and attitudes and awareness related to family health hygiene, specifically, women with at least an incomplete primary education were more likely to use modern methods than those with no education (Clements and Madise, 2004).

Education not only enhances cognitive abilities, but also it opens up economic opportunities and social mobility, and as a transformer of attitudes, schooling roles in attitude formation goes far beyond the enhancement of conceptual reasoning and may lead to ones transformations in aspirations and eventually, to questioning traditional beliefs. Education transforms attitudes and values from traditional toward modern and thereby enhancing modernization, which is essential and reliable to regulate fertility (Ayoub, 2004).

Couples in which the wife has little or no formal education are more likely to agree on having another child and that the husband's level of education has a stronger influence on the wife's fertility intentions than does the wife's own education. A study conducted by DeRose and Ezeh (2005) show that in Benin, Chad, Ghana,

Kenya, Mozambique, and Zambia, a higher proportion of couples without formal education were more likely to agree to have another child as compared to couples in which the wife has formal education. When the wife has less education than herhusband, her ability to influence decisions on fertility preferences and family planning may be reduced. However, in 7 of the 14 countries (Benin, Chad, Ghana, Malawi, Namibia, Zambia, and Zimbabwe) the proportion of couples in agreement on wanting another child is lower when the husband is more educated than his wife. To the contrary, in Rwanda, and Uganda, a larger proportion of couples agree on having another child when the wife's education exceeds that of her husband (DeRose and Ezeh, 2005).

2.5.4.3 Employment Status and Fertility Preference

Employment is one of the important factors, which determine contraceptive use. Employment can also be a source of empowerment for both women and men. It may be particularly empowering for women if it puts them in control of income. Women with gainful occupation are more likely to use contraception than those with no gainful occupation (DHS, 2010). A study conducted in Zimbabwe by Clements and Madise (2004) showed that, unemployed women were the least likely to be using modern methods and that could be associated with the low level of education.

2.5.5 Cultural Influence on Fertility Preference

Traditionally, social structure has been based on two kinship patterns, the patrilineal and matrilineal systems. In patrilineal systems, inheritance and power is vested with the husband's clan, based on the father-son relationship. In matrilineal societies, the status of children is established through their mother's clan. A woman's brother has

power and authority over the children of his sister and they normally inherit through him. In other words, contrary to the patrilineal system, in the matrilineal system, ties are not established between mother and daughters but, between the mother's brother and her children. An estimated 80% of the Tanzania's ethnic groups are patrilineal (TGNP and SARDC-WIDSAA, 1997).

2.5.5.1 Patriarchal Society

Caldwell and Caldwell (1987) as cited by UN (2007) advanced the argument that men and their lineages rule over reproduction and decide on matters of family size in Nigeria and elsewhere in Africa. African households are mostly rural, patriarchal and hierarchical, and they give great emphasis to perpetuation of the lineage. They are also frequently polygamous and embrace kinship networks. These characteristics of the African household affect individual perception of the possibility and desirability of making conscious choice regarding the number and timing of births. The social organization of households especially the place of women within them tend to inhibit the taking of conscious, deliberate choices regarding the number and timing of births (Makinwa-Adebusoye, 2001).

In patriarchal societies and in societies characterized by patrilineal kinship organization, the age difference is relatively large and unions in which the husband is ten or more years older are common. In those settings where the traditional social structure allows for a more equal status of spouses, where western forms of family formation have become common, or where exposure to the West and the processes of modernization has improved the status of women and the age difference is relatively small (Das *et al.*, 2011). However, the increasing age gap between spouses to the

favour of the husband means that he is more dominant on family decisions and increases his different socio-economic and demographic dominance as a result of higher knowledge and experience (Haddad, 2012).

In most African societies males have an upper hand in deciding how many children to have as more children further enhance his status as a man in society. Ogunjuyigbe, Ojofeitimi, and Liasu, (2009) noted that male dominance is particularly profound in matters of reproduction and they generally view reproduction as their prerogative, an issue in which the compliance of their wives is taken for granted. Ernest *et al*. (2011) contend that some women are willing to use modern FP methods, but they encounter resistance from their male partners/ husbands. For example, a husband may disapprove because he wants more children or is concerned about health effects, bothered by the inconvenience, or distrustful of traditional methods. Thus, in Africa husbands influence and exercise power in childbearing decisions in a major way (DeRose, 2007; Oyediran *et al.*, 2006; Feyisetan, 2000, as cited by Kodzi, 2009).

In male dominated societies like the Yoruba, women are not supposed to take independent decisions on reproductive issues. However, because of the relative decline in men's resources and women's increasing contribution to family resources in recent times, female participation in decision-making, including reproductive health matters, has changed (Feyisetan, 2000; Oyediran and Isiugo-Abanihe, 2002).

The cultural set up of the family structure which give husbands the power of reproductive decision making, whilst placing most of the economic burden for raising children on mothers, together with responsibility for agricultural production

have been outlined as the major factors influencing high fertility in sub-Saharan Africa (Mturi and Hinde, 2001). The argument is that, since husbands receives the advantages of status and prestige from paternity as heads of households, whilst not having to bear any economic burden; they are encouraged to opt for large families.

However, it is also argued by Mahmood and Ringheim (1998) that women and men could have similar fertility preferences even in traditional and highly patriarchal settings. Men may desire large families because they seek economic benefits and social prestige and power in having children, while women could have equally high fertility desires due to advantages of old-age support, enhanced status within the family, etc.

2.5.5.2 Matriarchal Society

A study conducted by Singh, Ram and Ranjan (2007) found out that Meghalayan women are usually the heads of the households and property transfer takes place through the women. The husbands have to move to the wife's house after marriage just as women move to their husband's house after marriage in a patriarchal system. Thus, when property is inherited through females, women are likely to have a higher social status, autonomy, and control over the family resources than males. This difference in the access to resources and in decision-making power may lead to differing reproductive behavior (Singh, *et al.*, 2007). Evidence from rural India suggests that access to and control over resources, mobility and decision making power do independently exert influence on reproductive behavior of women (Jejeebhoy, 2001). In a matriarchal system we may expect women to have sufficient autonomy to decide on the number of children they want to have, the time when they

want to have children, and to use contraception in case they are reluctant to have children. This may not be the case with women living in a patriarchal system (Singh *et al*., 2007).

2.5.5.3 Religion Influences on Fertility Preference

There is a considerable body of literature on the role of religio-cultural processes as important factors in sustaining the high fertility in sub-Saharan Africa (Caldwell, 1982; Bongaarts, Frank, and Lesthaeghe 1984; Caldwell and Caldwell 1987; Hammel 1990; National Research Council 1993; Benefo, Tsui and de Graft Johnson, 1994; Meekers 1994; Dodoo and van Landewijk 1996; Dodoo, Luo and Panayotova 1997; as cited by Takyi *et al*., 2006). Therefore, the adoption of contraception seem to be a cultural process that depends on access to contraceptives and acceptability of information and this is related to one's faith or community faith (Agadjanian, 2005).

Findings from these studies indicate that Sub-Saharan Africa may well offer greater resistance to fertility decline than any other world region. The reasons are cultural and have much to do with a religious belief system that operates directly to sustain high fertility but, that also has molded a society in such a way as to bring rewards for high fertility (Takyi*et al*., 2006). This sentiment was supported by Yeatman and Trinitapoli (2008) who believed that religion was and to an extent still is seen largely as a barrier to fertility decline and to family planning adoption in the region.

Some researchers have argued that the religious context in which individuals are socialized impacts their family values, attitudes and practices about sexual behavior

and thus their fertility. Denominational differences in teachings and sanctions against proscribed behavior such as the use of contraceptives and premarital sex may influence the timing of marriage and fertility levels (Thornton and Camburn 1989 as cited by Takyi *et al*., 2006).

Agadjanian (2001) found that Protestants and Catholics in urban Mozambique were more likely to have used or had conversations about modern family planning than were women from "spirit filled" or more evangelical churches. He argued that the urban religious setting of Mission Protestants and Catholics, in which churches tend to be large and diverse, facilitates interaction and mixing of women of different education levels, thus enabling social learning that is relevant to reproductive behavior. In these heterogeneous settings, women who were less likely to know of or use contraceptives came into contact with women who were well versed in these technologies and subsequently adopted their behaviors.

While religious effects in urban areas were specific to members of particular groups, in rural areas, on the other hand, any religious involvement was associated with increased contraceptive use and contraceptive dialogue. For these rural women, Agadjanian (2001) argued that, attending religious services provided important social interaction within their congregation in what could otherwise be a quite isolated lifestyle where little new information was available. This argument is, of course, a variant on the theory of diffusion, which has long played a critical if occasionally controversial role in theorizing about fertility decline and the spread of contraceptive use (Bongaarts and Watkins 1996; Cleland and Wilson 1987; Mason 1997).

In many of the European studies, a woman's degree of religiosity is as or more important than her level of education in determining the number of children she will bear over a lifetime. In Spain, women who remain practicing Catholics were considerably more fertile than their non-practicing sisters, which wasn't the case as in 1985. This is probably because only those truly committed to religion remain attendees while nominal Catholics have dropped away. Since the more religious are more fertile, the departure of social or uncommitted attenders helps unmask the connection between religiosity and fertility (Berghammer and Philipov, 2006).

A study conducted in Ghana found out that many Ghanaians spend a considerable amount of their time in faith and religious-based interactions where the diffusion of information on reproductive norms is more likely to occur and religion could provide the organizational context for behavioral change on fertility related behavior (Takyi *et al*., 2006). Any variations in observed fertility behavior between religious groups reflect differential access to social and human capital (e.g. education) rather than religion *per se*. Thus, a debate continues as to whether differences in fertility behavior are due primarily to religious processes or the interplay of socio-economic forces (Takyi*et al*., 2006).

In a BBC World Service survey, three quarters of those questioned in Africa identified religious leaders as the most trusted group, compared to only a third worldwide (BBC News, 2005). Asked who had the most influence on their decision making over the past year, a significantly higher proportion of respondents in Africa

indicated religious leaders. The figure for Africa was about three times greater than the global average (Takyi *et al*., 2006).

Karim, (2005) reported that Muslim demographic dynamics occurred firstly at the macro level, involving Islamist governments and political actors enacting policies which restrict access to family planning while exhorting their populations to have more children. This kind of politics has delayed the onset of demographic transition in certain cases and therefore support for family planning in the Muslim world cannot be taken for granted and faces Islamist challenges in certain areas.

The second form of Islamist fertility appears on the micro level, and seems likely to grow more important as Muslim societies modernise and move through their demographic transition. This involves Islamist individuals who have full access to family planning and urban material incentives not to have excess children choosing to have larger families than non-Islamist Muslims.

For example, in Pakistan, things have begun to change. Most of its clerics now offer family planning information at mosques, and agree that Muslim texts support contraception (Karim, 2005). This gave the imprimatur of a number of Islamic family planning conferences, including a high-profile 1990 event in Indonesia sponsored by Egypt's al-Azhar University, a leading center of Muslim religious thought.

Agadjanian (2001) also pointed out that changes in reproductive behavior do not always take place in isolation. The spread of information and new ideas about

reproductive behavior is often influenced by several factors, including for instance, one's social networks (Valente *et al*., 1997 as cited by Takyi *et al*., 2006). According to Takyi*et al.* (2006), the ties that religious congregations provide could in turn provide the stimulus for behavioral changes and the diffusion of small fertility norms. In Pakistan, ninety delegates from almost every school of Islamic thought attended a three-day "International Ulama Conference on Population and Development" held in the Pakistani capital, Islamabad in 2005. The consensus, drawing on the examples of Tunisia, Iran, Indonesia and other low-fertility Muslim countries, was that family planning was in harmony with the tenets of Islam (RCPRHE, 2005).

Cohen (1998) has linked the declining fertility rate in Africa to increased use of contraceptives. It is in this area that religion could either have a negative or positive impact on contraceptive use. Because the religious and traditional belief systems are primarily anti-family planning, the use of contraceptives in traditional African societies tends to be de-emphasized. It is therefore no surprise that a number of studies find the various religious groups to differ in terms of their contraceptive use behavior in Ghana (Addai, 1999b) as cited by Abdulla, (2014).

Among the many Muslim societies that have embraced family planning, none is more striking than Iran. In the 1960s and 1970s, the Shah pursued a westernization policy focused on getting women outside the home into education and work, and making contraception widely available. Fertility began to decline. Then came the Iranian Revolution in 1979. Ayatollah Khomeini's revolutionary regime codified Islamic dress into law, re-segregated the sexes and sought to push Iranian women

back into the home. Family planning clinics were derided as an imperialist plot against Islam and closed; the age of marriage was lowered to 9, and the role of women as mothers lauded. The Iran-Iraq war in the 1980s added steam to the regime's emphasis on higher fertility. Unsurprisingly, fertility rates returned to traditional high levels of around 6 children per woman.

Then the unthinkable began to happen. As the population approached 60 million and the burdens of a young population strained social resources, religion bent to accommodate secular demands. 'Secular' voices came from all directions: up from the street and down from policy makers and intellectuals. These actors lobbied the religious authorities to act. Their efforts were smoothed by the content of Islamic texts, which do not forbid contraception and are unclear on abortion (Kaufmann, 2009). A fatwa was obtained from a prominent cleric, and within a very short space of time in the late 1980s, family policy in Iran went full circle, from pronatalism to planning (Karim and Jones, 2005).

The religious authorities saw as their first and primary task to dispel the myth that the population debate originated in modern Western society. Reviewing debates on the permissibility of fertility control and sponsoring research and republication of medieval Islamic works on population and contraception, they established that concern about population had preoccupied Muslim scholars long before it was discussed in the West. Thus, the authorities were able to celebrate Iran's Islamic heritage, to promote family planning, and to reinforce their independence from the West (Hoodfar and Assadpour, 2000). Government poured funds into reopening

clinics and training an army of local women as family planning advisors and practitioners. Fertility plummeted from 6 to 2 children per woman in less than two decades, and Iranian fertility is now below the replacement level. Women continue to marry early, in accordance with Islamic law, but combine this with early and effective use of contraception (Abassi-Shavazi, 2006).

In Afghanistan and Pakistan's tribal areas, Taliban insurgents have taken to killing health care workers involved in family planning. Threats, kidnappings and assassinations have brought family planning to its knees in disputed areas. After murdering a female health care worker in Kandahar, Taliban insurgents wrote to her employer: *"We took up arms against the infidels in order to bring Islamic law to this land,"* they crowed in a letter bearing the seal of the Taliban military council. "*But you people are supporting our enemies, the enemies of Islam and Muslims..."* Personnel were trained to distribute family planning pills. "*...the aim of this project is to persuade the young girls to commit adultery* (Blackwell 2008)."

Iran, Azerbaijan and Indonesia are relatively religious countries, yet have lower than average fertility for Muslim countries while Uganda and Tanzania have higher average fertility despite middling religiosity. This finding suggests that Muslim countries which have strong religious norms do not, by itself, have higher fertility (i.e. Iran, Azerbaijan) while high fertility Muslim countries may not be the most religious i.e. Uganda, Tanzania (Kaufmann, 2009). Ethiopia had the second largest Muslim population in sub-Saharan Africa. However, there was a perception in Ethiopia that there was more rapid population growth among the Muslims than

among Christians, potentially tipping the balance toward Ethiopia becoming a majority Muslim country in a near future (Teller and Gebreselassie, 2009*)*.

2.5.5.4 Ethnicity Influences on Fertility Preference

The term ethnicity refers to the relationships between groups whose members consider themselves culturally distinctive. The social and family structures of many ethnic groups influence the ideological, cultural values and norms including sexuality. For example, in Kenya as in many African countries, ethnic identity/belonging is a much stronger attribute than the wider national identity.

The important thing to note however is that the fertility rates for the majority of the ethnic groups are higher than the national average of 4.6 and that only a few ethnic groups, namely: Kikuyu, Embu, Meru and Taita/Taveta have fertility levels that are below the national average (Khasakhala, 2011). The role of contraceptive use as a major factor in fertility decline in Kenya appears to be negligible for the majority of the ethnic groups. For example, among the Somali, Turkana, Kuria, Luo, Maasai and Kalenjin, the index of contraceptive use had no effect or minimal effect in fertility inhibition. These are also the ethnic groups which had the highest fertility levels in 2003 (Khasakhala, 2011).

Increase in contraceptive use has been touted as being one of the major factors in fertility decline and stall in Kenya over the years (Blacker, 2005, Westoff and Cross, 2005). However, use of contraceptive could only explain fertility declines among

some ethnic groups while other reasons need to be sought for the low use and subsequent high fertility rates among some ethnic groups (Khasakhala, 2011).

2.6 Family Planning Status and Trend in Tanzania

Family planning services were introduced in Tanzania in 1959 by the International Planned Parenthood Federation (IPPF) through Family Planning Association of Tanzania (UMATI) - also known in Kiswahili as *Chama cha Uzazi na Malezi Bora Tanzania*. In 1974, the government of Tanzania allowed UMATI to expand family planning services to Maternal and Child Health Clinics (MCH) throughout the country, but the expansion was limited because of resource constrain and therefore, the level of contraceptives remained low.

The government launched its first National Family Programme in 1989, by then only about 5 percent of women were using modern family planning methods. Along with the coordination of family planning activities, NFPP is also responsible for management and distribution of contraceptives to all service delivery points. There are other government departments, non-governmental organizations (NGOs) assisting the NFPP in providing services. However, between 1992 and 1996 the percentage of women using modern contraceptive methods doubled from 6.6 percent to 13.3 percent, and number of children per woman dropped from an average of 6.3 to 5.8 births per woman. There was a steady increase of contraceptive use from 1991/92 to 2010 where by the proportion of use of modern contraceptives increased from 7 to 27 percent. Use of traditional methods has generally remained low at between 4 percent and 7 percent during the period under review (Figure 2.4).

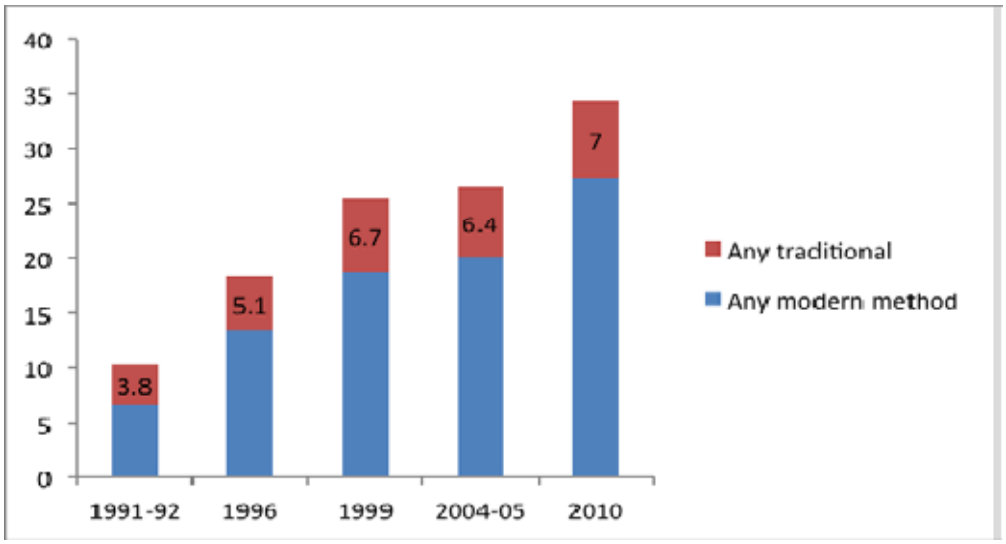


Figure 2.4: Trends in Contraceptive use 1991-2010

Sources: Tanzania Demographic and Health Surveys, 1991/92, 1996, 2004–05, 2010 and Tanzania Reproductive and Child Health Survey, 1999

Since the mid 1990s, the Population Services International operated a social marketing programme in Tanzania (URT, 2000). These services included social marketing of Salama male condoms and Care female condoms. The joint efforts of these initiatives have contributed positively to raising awareness of, and use of contraception.The Government of the United Republic of Tanzania adopted the National Population Policy in 1992. Since then, new developments with a direct bearing on population and development have been taking place at various levels. The National Population Policy was revised in 2006 in order to catch up with changes that were going on nationally and internationally.

The policy reaffirms principles of the International Conference on Population andDevelopment (ICPD, 1994) as embodied in the Plan of Action that is all couples and individuals has the basic right to decide freely andresponsibly on the number

andspacing of their children as well as to have access to information, education and the means to do so among other principles. Apart from having this policy, the Tanzania population kept raising from 34.4 million people in 2002 to 44.9 million in 2012. The population trend for Tanzania from 1967 to 2012 is as shown in Figure 2.5.

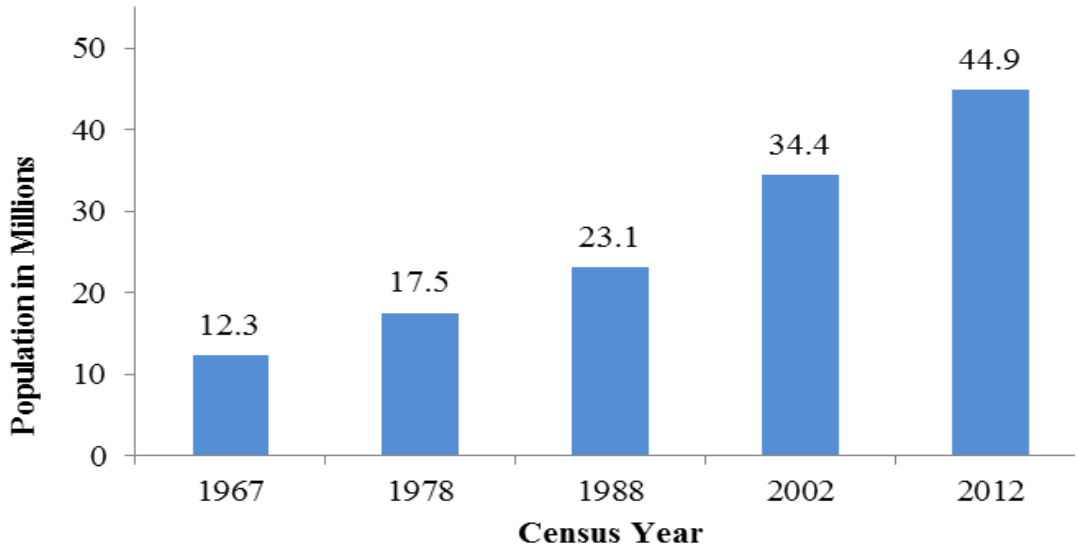


Figure 2.5: Population Trends in Tanzania, 1967 – 2012 Censuses
Source: URT (2013)

Recently, Green Star Family Planning Campaign has been revitalized and is rolled out on radio, through electronic and print media, in health facilities, and at the community level. Among others, the campaign has opened an SMS platform (m4RH) for individuals with mobile access to receive information on reproductive health in an effort to solicit many people to use contraceptives and make them aware of various reproductive health issues (URT, 2013).

In 2010, Tanzania made a commitment to the United Nations Global Strategy for Women's and Children's Health, to increase contraceptive prevalence rate (CPR) to

60 percent by 2015. This campaign falls within the National Family Planning Costed Implementation Program (2010-2015), a framework that guides family planning partners to reinvigorate the family planning program to save the lives of women and their families, while contributing to socio-economic development focusing in increasing the use of contraceptives to 60 percent by 2015.

Pile and Simbakalia (2006) emphasized that, while various efforts, have been done to try to increase the level of contraceptive use in Tanzania, at the same time various developmental processes tended to interfere with this progress including decentralization of delivery of basic health services (including FP) to the district council level, integrating the Family Planning Programme (FPP) into Reproductive and Child Health Services (RCHs), launching Poverty Reduction Programme (PRSP) in which there is only one indicator for FP. All these developments reduced the visibility of FPP and consequently resources devoted to it. Funding contraceptives commodities and personnel were adversely affected. Since 1997 there was no funding for in service training except through donors. This was due to inconsistencies between local government regulations and Ministry of Health (MOH) requirements. The shift to basket funding resulted to significant stock out of contraceptives until 2005 when the government allocated a budget line item for contraceptives.

Apart from mentioned developmental activities the raise of HIV/AIDS epidemic caused a shift of attention and financial resources and personnel and therefore a loss of focus (championship). The slowdown of pace resulted in shortage of

commodities and substantial external funding to family planning which in turn affected the pace of expansion of contraceptive use and hence the low achievement in controlling fertility rate and population in general.

2.7 Policy related to Fertility Rate in Tanzania

As noted earlier, the fertility rate in Tanzania has declined from 5.8 in 1996 to 5.4 in 2010, mainly due the various campaign put forwards by the government and other stakeholders. However, the reported rate which is still high could be an outcome of a number of factors, including shortfall in the Law of Marriage Act (LMA) No.5 of 1971 that legalizes marriages of the girl at the age 14 and 15 with court and parents/ guardians consent, thus denying the girls among other things, the right to formal and informal education. At such low age, the individual is most likely to have insufficient education for her to be able to manage challenges of being a wife and a mother at the same time.

Apart from that, at age of 15 or below, the girl is still in transition from childhood to adulthood and therefore, carrying pregnancy and delivery is a high risk undertaking as girls are not matured physically and psychologically. This pregnancy and delivery process can cause complications which can cause threat to the life of the mother, child or both (Leppalahti *et al.,* 2013). It is very unlikely for this child to use FP as due to traditional culture, she will have to obey her husband who is most likely much older than herself and therefore, she will not have much say on various decisions in the household including the use of FP. Given her background (low age and education), she is very likely to mother a good number of children in her life time.

This is one way of encouraging high fertility rates and high maternal mortality rate in the country. Such Laws need to be changed in order to give a Tanzanian girl child her right to grow and mature physically and mentally before entering marriage.

Legally, marriage is defined as a voluntary union between a man and a woman intended to last for their joint life. In contradiction the National Elections Act CAP 343 R.E (2010) stipulates that any one below 18 cannot vote or contest because she/he is considered a minor. It is strange if a girl child aged 15 years or below can be allowed to get married and handle all the family responsibilities but she is considered not mature enough to vote.

Likewise, the Law of Contract Act CAP 345 R.E (2002) on the other hand, provides that every person is competent to contract at the age of 18 and any persons below this age is incompetent and contract entered by such a person not legally valid. This is an indication that the law of marriage needs to be changed, or else a girl child in Tanzania will not be able to stand in court and defend herself on various issues based on the contract of marriage. This is a loophole which - if not be covered, it will continue to have effect on fertility rate, infant, and maternal mortality rates in Tanzania.

2.8 Knowledge Gap

(i) Researches on fertility in Tanzania started before independence in 1961. However, stagnant fertility rates indicate that efforts in this area are failing to make a significant impact on the use of FP strategies. Though several studies

have been conducted regarding fertility many of them were conducted at the National level eg. Demographic and Health Surveys (DHS). Tanzania encompasses a great variety of ethnicities, cultures, histories, mores, and occupations within distinct geographical regions (Lawrence, 2010). Most of these studies used DHS data which involves cross country comparison, and therefore failed to capture variations that are unique to the country. These gaps in turn may impact the design and implementation of FP interventions aimed at increasing contraceptive prevalence and controlling fertility levels in Tanzania. This regional context creates pressure on contraceptive users in the form of misinformation, obvious or assumed prohibition to use contraceptives and contraceptives availability. Previous studies often ignored this heterogeneity in favour of country wide coverage. This study fills this gap by providing information specifically to the study areas.

(ii) These studies were conducted on women only, like that of Mtae (2012) conducted in Morogoro (Morogoro Municipal) on contraceptive use; Ghiselli, (2012) which used 2010 DHS data and women from Arusha region on family planning and under five mortality rate and men only study like the one conducted by Mwageni, (2002) in Mbeya concerning attitudes towards Sex preference and contraceptive behaviour among men. Another study was conducted by Chimhutu (2011) in Mvomero explored how service provision and the use of incentives in maternal health is perceived by health practitioners and community members in five health centers of Mvomero Districts using Health workers and female community members. However, there is no study

done which involved couples. The involvement of the couple would add more value by understanding how couples use contraceptives and how their family size are affected by social, economic and cultural factors by getting views and opinions of individual couples (men and women) from the study areas. This study intended to fill this gap by obtaining information from couples regarding social, economic and cultural factors in relation to contraceptive use and family size.

(iii) Most researches done were focused in one study area only. Comparison between low and high CPR areas would provide information on what might be the causes of such differences. This study filled this gap by comparing information obtained from the area with low CPR (Kishapu) and that of high CPR (Mvomero).

(iv) Most of the other studies related to this one used mostly qualitative methods (Chimhutu, 2011) and some used a mixture of qualitative and quantitative methods but without using any models (Mtae, 2012) and purely quantitative method like that of Macfallen and Upendo (2014). This gap was filled as this research involved a combination of both qualitative and quantitative methods including the use of logistic regression model in order to get a touch of both qualitative and quantitative facts.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Chapter Overview

This chapter discusses the description of the study areas, research design, research ethics, training of research assistants, data collection methods, validity and reliability checks of instruments, methods for data analysis and lastly scope, limitation and delimitation of the study will be presented.

3.2 Description of the Study Area

3.2.1 Mvomero District

Mvomero District is one of the five districts in Morogoro Region. It was created by splitting the former Morogoro District and the District was formally gazetted on 17th September 2004 through the Government Notice Number 453. The name 'Mvomero' was taken from the name of the famous Mvomero River, which passes through Mvomero village in the District. The name Mvomero originated from the Luguru word *vomea*, which means 'to sink.'

According to the 2012 Population and Housing Census, the population of Mvomero District was 312,109 of which 154,843 were males and 157,266 females with average household size of 4.3 and an average population growth rate of 2.6 percent which is slightly lower than the national average of 2.7%. The district is administratively divided into four divisions, namely: Mgeta, Mvomero, Turiani, andMlali which together comprise of 23 wards and 115 villages.

The dominant ethnic tribes are Luguru, Kaguru, Nguu and Zigua. In the recent past, there has also been an influx of other ethnic tribes such as Wakwere, Maasai, Wasukuma, Pogoro, Mang'ati, and Barbeig who migrated to Mvomero in search of pastures for their livestock while the Pogoro and Kaguru migrated to Mvomero in search of good fertile agricultural valleys.

The district's economy depends highly on agriculture, mainly from crop production. Major food crops include maize, paddy, cassava, pulses, cocoyams and sorghum; and the main cash crops include sugarcane, coffee, simsim, sunflower, bananas and vegetables. Apart from agricultural crops there are also varieties of livestock like beef and dairy cattle, indigenous and dairy goats, sheep and poultry. Crop farming is the major economic activity employing 81.6 percent of the total labour force followed by elementary occupations (9,992), crafts (2,754), Street vendors (1,901) and Livestock keeping (1,296). More than 80 percent of Mvomero adult population earn their livelihood from agriculture though mainly at subsistence level (URT, 2002; Morogoro Regional Commissioners Office, 2006).

In 2006, Mvomero had 43 dispensaries, 35 of which were public and 8 were private dispensaries, health centers and hospitals in Morogoro region was 1.25%, 19.23% and 14.29% respectively (Profile of Morogoro Region, 2007). The three district level hospitals in Mvomero are Mtibwa Sugar Estate Hospital - a private employer's facility, Turiani Hospital - a private religious facility, and Chazi Hospital - a public facility.

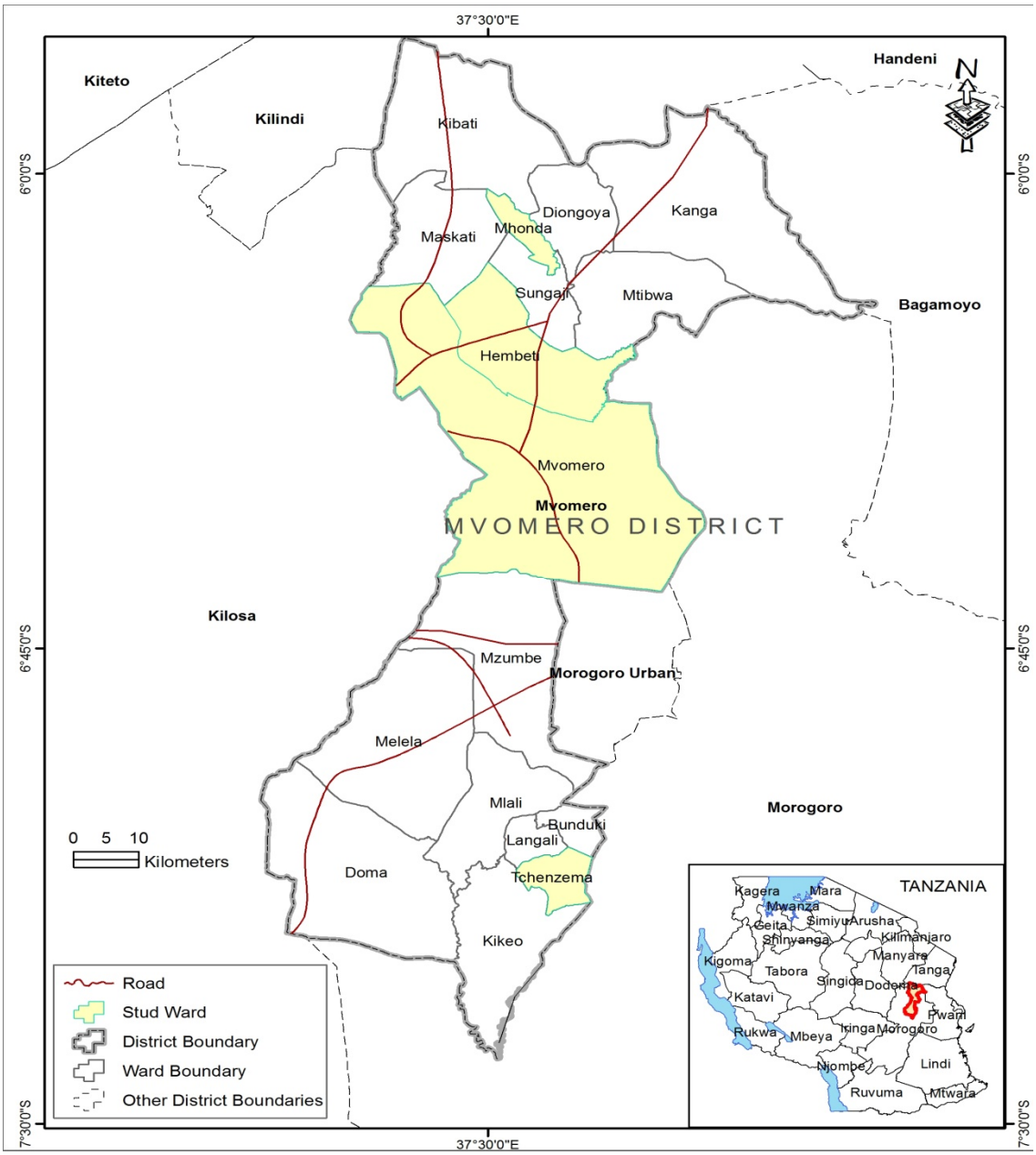


Figure 3.6: Map of Mvomero District
Source: University of Dar es Salaam, IRA, GSI Lab.

3.2.2 Kishapu District

Kishapu district was officially inaugurated in July 2006 under the Local Government Act No. 7 of 1984 which established the district Councils. Other districts in Shinyanga region include Kahama district council, Kahama town council, Shinyanga district council, and Shinyanga town council.According to the 2012 population

census, the population of Kishapu district was 272,990, of which 135,269 were males and 137,721were females with average household size of 6.3 people and an average population growth rate of 2.9 percent which is higher than the national average of 2.7 percent.

The District is administratively divided into three divisions - Kishapu, Mondo and Negezi and these in turn are subdivided into 20 wards and 114 registered villages. The major ethnic tribes are Wasukuma, Wanyiramba and Wataturu.

Agriculture and livestock keeping are the two major economic activities of the people in the district employing 77.2 percent of the total labour force. The main cash crops are cotton, paddy and chickpeas and the main food crops are sorghum, sweet potatoes, cassava, legumes, maize and paddy. Livestock keeping includes cattle, goats, sheep, donkey and poultry. Forestry, fishing and related activities are the second largest economic activity employing 7.3 percent, followed by mining and quarrying 3.5 percent, trade and commerce 2.7 percent, public administration and education sectors 2.3 percent and others 6.8 percent.

Kishapu District is a newly formed district. It has no district hospital. Residents get health services from 4 health centers, Williamson Mwadui Diamond Co. Ltd Hospital - a private hospital, 45 government, 9 private dispensaries and 2mobile/outreach clinics. Kishapu health centre situated nearest to the District headquarters, act as a potential service provider to the community. Currently, the available health facilities are inadequate given the size of the districtand the population. By 2012 there were 116 nursery schools, 116 primary schools, 27

secondary schools and 143 adult education centers. Most of these were run by the government.

Figure 3.7: A Map of Kishapu District

Source: University of Dar es Salaam, IRA, GSI Lab

3.3 Research Design

Research design is the conceptual structure within which the research is conducted; it constitutes the plan for the collection, measurement and analysis of data. Research design is a plan for collecting and utilizing data so that desired information can be

obtained with sufficient precision and that the research question s can be answered (Saunders, *et al.,* 2009).

This study employed cross sectional research design for determining linkages of factors by observing all parameters at the same time. It is one of the research methods commonly used within the social science. Under this research design variables of interest in a sample subject are examined once, and the relationship between them determined (Bryman, 2004). It utilizes different groups of people who differ in the variable of interest, but share other characteristics such as socioeconomic status, educational background and ethnicity (Bailey, 1990).

The cross sectional surveywas selected because it is flexible and itfocusses on studying and drawing conclusions from existing differences between people, subjects, or phenomena.It is also capable of using data from a large number of subjects and, unlike observational studies, is not geographically bound.Lastly, it is relatively inexpensive and take up little time to conduct, therefore can be changed according to circumstance. The choice of this method was partly warranted by its ability to meet the objectives of the study.

3.3.1 Study Population

The study population was married couples in the households in Mvomero and Kishapu districts. The term “married” refers to legal or formal marriage, while “living together” designates an informal union in which a man and a woman live together, even if a formal civil or religious ceremony has not occurred. In this study

these two categories were considered as couple. As one of the condition to be mate for this study, all 586 respondents were couples.

Couples in this context include married as well as those living together. But in order for them to be included in the study, they were supposed to have at least one child. The choice of couples was based on the fact that they were considered to be more sexually active than the othergroups of women and men and more likely to engage in family planning especially after getting their first child. The sampling unit was couples who live in a particular household. Various individuals dealing with reproductive matters in the District, District Reproductive and Child Health Oficers (DRCHO), religious leaders as well as elders (male and female) were also interviewed for detailed information regarding family planning and social cultural issues.

3.3.2 Sampling Methods

Sampling is the act, process, or technique of selecting individuals or objects such that selected group contains elements representative of the characteristics found in the entire group. It is the process by which inference is made to the whole by examining a part of it (Orodho and Kombo, 2002, and Orodho, 2003). A multistage sampling technique and purposive sampling were employed in order to get representative sample.

3.3.2.1 Multistage Sampling

Multistage sampling refers to sampling plans where the sampling is carried out in stages using smaller and smaller sampling units at each stage. It is a sampling

method in which larger clusters are further subdivided into smaller, more targeted groupings for the purposes of surveying (Kothari, 2006; Kaplan, 2013). It included both, purposive sampling and simple random sampling.

3.3.2.2 Purposive Sampling

Purposive sampling is a form of non-probability sampling in which decisions concerning the individuals to be included in the sample are taken by the researcher, based upon a variety of criteria which may include specialist knowledge of the researched issue, or capacity and willingness to participate in the research (Jupp, 2006). This is a sampling technique in which the researcher can gather information in those people who meet requirement of the sample chosen criteria, and this sampling method was extremely useful in describing various social, economic and cultural phenomena.

This sampling method was used in order to capture qualified study areas and respondents and specifically itwas used to select representative districts with low and higher contraceptive prevalence for comparison purpose. It was also used in selection of couples (couples aged between 15-49 years women and 15-64 years menwith at least one child of their own). Those were conditional variables. Key informants were also selected purposively in order to get the required information. These included one DRCHO from each district (2), two elders from each selected wards (8) and 3 religious leaders in each district (3). Purposive sampling technique provided opportunity for the researcher to capture subjects of desired characteristics (Table 3.1).

3.3.2.3 Simple Random Sampling

Simple random sampling is the basic sampling technique whereby the researcher selects a group of subjects (a sample) for study from a larger group (a population). Each individual is chosen entirely by chance and each member of the population has an equal chance of being included in the sample (probability sampling). Every possible sample of a given size has the same chance of selection (Garson, 2012).

Simple random sampling was used to select four wards in Kishapu and Mvomero districts (8) from a list of wards in the district. It was used in selection of two villages from a list of villages in each ward (16), as well as selection of twenty households in Mvomero and seventeen in Kishapu Districts with couples (whether married or living together and with one child) from the list provided by the village/hamlet executive officer (VEO). As Kumar (2005), Fellows and Liu (2008) asserted that, there is an equal chance of selection for each member of the population in random sampling (Table 3.1).The sampling frame for this study was expected to be the villages register from VEOs office. Unfortunately it was practically not possible as there were no registers in these offices. Therefore, with the assistance of VEOs and WEOs, a list of suitable households was prepared and then the households were selected randomly.

Table 3.1: Summary of Composition of Study Sample

Respondent Category	**Kishapu**	**Mvomero**	**Total**
Couples	272	336	608
DRCHOs	1	1	2
Elders	8	8	16
Religious leaders	3	3	6
Total	**284**	**348**	**632**

3.3.3 Sample Size

The sample size required for the study was based on the assumed proportion of couples. The sample size for Mvomero District was 328 and for Kishapu District was 258, making a total of 586 respondents. Sample size was determined by the following formula given by Kothari, (2006).

$$n = \frac{Z^2 \, Ø \, P^2 \; N}{(N-1)\,(e^2) + Z^2 \;\; Ø \, P^2}$$

Where:

n = Required sample size of the study population

N = Size of the Universe population of the community studied

ØP = Assumed standard deviation of the studied population = 2.15

e = Acceptance error for the whole estimation = 0.5

Z = Table value under normal curve for the given confidence level of 95%

According to URT (2013) the population of men aged 15-64 for Mvomero were 80,959 and women aged 15-49 were 72,143 in Mvomero making a total of 153,102 and Kishapu District men aged 15-64 were 64,015 and women aged 15-49 were 59,671 making a total of 123,686.

3.4 Research Ethics

In undertaking the research, privacy and confidentiality was observed and research clearance was sought at all levels (Appendix I). Prior to interview, the researcher and research assistants asked for individual's consent and the objectives of the research was explained to prospective respondents. Those who were not ready to be interviewed for one reason or another were excused from the study.

As the research involved both husband and wife in a household, the interview was conducted separately in order to ensure confidentiality and, therefore, maximum freedom of expression of ideas from both couples. (In some cases female respondents first tried to make sure that their male counterparts cannot hear what they are saying by lowering their voice for fear of being beaten or harassed).

3.5 Training of Research Assistants

A total of 14 research assistants were selected for training (seven from Kishapu district and another seven from Mvomero district). These research assistants were graduants from Sokoine University of Agriculture (SUA), Dodoma University, St. Augustine University, Tumaini University, Mwenge University and two were third year students from Moshi University College of Co-operative and Business Studies (MUCCoBS).

Figure 3.8: Research assistants during one of the training sessions in Kishapu District

Source: Field work, 2013

Two trainings were conducted at different times, one at Kishapu district and the other one at Mvomero district for three consecutive days, in order to make the research assistants familiar with the objectives of the study and all the questions. One ward executive officer (WEO) was part of the trained team, and he was the one who guided us through all the wards.

3.6 Data Collection Methods

The data collection process started in mid July, 2013, and ended in the mid August, 2013. Research and research assistants visited respondents at their homesteads under the guidance of village chairpersons and village executive officers (VEOs). The study employed both primary and secondary data as main sources of information. Primary data were collected at the field and its collection involved structured interview, focus group discussion, in depth interview as well as non participant observation methods were used. Secondary data were obtained from both published and unpublished reports on fertility issues in order to get a wider knowledge about the study and to get a variety of information regarding the subject matter on what others have been done.

3.6.1 Primary Data

Both quantitative and qualitative data were collected in order to obtain answers to the objectives of this study. Semi structured questionnaire was used to obtain quantitative information (Appendix III and IV). Qualitative data were obtained through focus group discussions (FGDs) using a checklist (Appendix V) and in depth interviews using key informant interview guide (Appendix VI). The combination of

quantitative and qualitative data was done for data triangulation to ensure validity of findings.

3.6.1.1 Questionnaire

Couples were interviewed using semi-structured questionnaires with both open ended and closed ended questions (Appendix III and IV). The use of questionnaire is supported by Gass and Mackey (2007) who suggest that, questionnaires need not be solely closed or open ended, but they can blend different question types depending on the purpose of the research.

Couples were visited at their homestead. Husbands were interviewed by a male research assistant and wives were interviewed by a female research assistant. The nterview process for the two categories of wives and husbands was done separately in order to allow maximum freedom of expression of opinion.

3.6.1.2 Focus Group Discussion (FGD)

At the simplest level, a focus group is an informal discussion among a group of selected individuals about a particular topic (Wilkinson, 2004). A focus group approach was used to explore and examine what people think, how they think, and why they think the way they do about the issues of fertility and family planning without pressuring them into making decisions or reaching a consensus. A check list was used to guide the moderator in leading the discussion (Appendix V).

Four focus group discussions were held in each village - two for males and two for females. A sample of between 6-8 respondents was requested to participate in the

FGD. According to Patton (2002), typically groups of people who participate in the discussionshould be composed of six to eight and discussions should last for half an hour to two hours.

Furthermore, respondents were sub-grouped basing on their age - from 15 to 30 years and from 31 to 49 years for females and 15-35 and 36-64 for females in order to get the maximum freedom in expressing their views. There was a moderator, and two trained research assistants who were responsible with taking notes - verbal and non-verbal, and one responsible with audio taping and taking of photographs. Participants were given numbers by the moderator for ease of remembrance in order to make them feel that they were part of the team and for the recognition of their contribution.

The role of the moderator was to make everyone feel welcomed, at easy, ask questions, probe for more information and give all the participants enough time to answer questions. Inclusion of everyone in the discussion was very important in order to get views of each participant. Researcher and one research assistant were taking notes while another research assistant was recording the discussion using digital recorder. This was essential for the maintenance of quality and consistency during report writing.

The conversation was usually held outdoors near the village under the tree, or in a village building to show the participants that the focus group had the approval of the local authority. The discussions were conducted in Kiswahili by a trained moderator. He started by describing the proceedings of a focus group then he paused the questions. He encouraged all participants to air their views and probed for answers

when some members were hesitant. Discussions for each focus group lasted between 45mns and 1.30 hrs.

3.6.1.3 Key Informant Interview

Key informants were interviewed by the researcher, and one research assistant helped with recording both hand written and digital recording, in order to capture all the necessary details (Appendix VI). An in depth interview guide was used, to make sure the discussion is on truck and in order to maintain consistency. Guion, (2006) emphasized that the interview guide should be designed to help the interviewer focus on topics that are important to explore, maintain consistency across interviews with different respondents, and stay on track during the interview process. In this study an interview guide was used to capture information from the key respondents.

3.6.1.4 Non Participant Observation

Observation is a purposeful, systematic and selective way of watching, listening to an interaction or phenomenon as it takes place (Kumar, 2005). The researcher had to watch and listen careful how respondent communicate and behave (physical behaviour, verbal behaviour, appearance, and any other clues that can be useful to the research).

3.6.2 Secondary Data Collection

These are data that has previously been collected, and that are utilized by a person other than the one who collected the data. This study used various documents related to subject of the study in libraries, government offices, Internet and reports, to gather secondary data information. These documents included censuses reports, surveys,

books, journals and different policies**.** Secondary data were used in order to get a wider knowledge about the study and to get a variety of information regarding the subject matter and on what others have been done on that area.

3.7 Validity and Reliability Checks of Instrument

To ensure validity and reliability the researcher pre-tested 20 questionnaires to the respondents with similar characteristics to targeted population of this study. The questionnaire was then edited and corrected as necessary. This process is emphasized by Aldridge and Levine, (2001); Gay and Airasian, (2003); Wilkinson and Birmingham, (2003); Bell, (2005), Cohen *et al.*, (2007); Bryman, (2008). Content validity is also very important, and this can be obtained through other academicians reflections on their contents and structures (Bryman, 2008; Gass and Mackey, 2007). Questionnaires were checked by two experts in research in this area followed by a panel of members who went through it and gave their helpful and constructive comments during proposal presentation.

The reliability of scale (internal consistency) was obtained by using Cronbachalphadeveloped by Lee Cronbach in 1951to provide a measure of the internal consistency of a test or scale; it is expressed as a number between 0 and 1. A reliability of .70 or higher is considered acceptable in most social science research situations. Alpha is an important concept in the evaluation of assessments and questionnaires.

The spousal communication, attitude towards wife beating and religiousity items were treated individually and combined into an index, because factor analysis

showed that they covaried on one factor. The index was calculated as follows: For each item, a positive response was given a score of one, and a negative response was scored zero and a neutral item was given a score of two. The scores for the items were added together. The Index was further categorized into low, medium and high levels for communication, decision-making, patriarch/matriarch and religiousity. For the attitude towards wife beating the index was further categorized into negative, positive and neutral. For communication items the index ranged from 10 to 30 was obtained, for decision making was 6 to 20, attitude towards wife beating obtained an index ranging from 6 to 18, patriarch/matriarch index ranged from 1 to 7 while religiousity index ranged from 0-5.

Reliability coefficients (Cronbach's alpha) for the index were within acceptable limits for all indeces - as for communication was 0.77, decision making was 0.76, attitudes towards wife beating was 0.80, patriarch/matriarch was 0.70 and religiousity 0.83. According to Hof, (2012) an acceptable value must lay between 0.70 and 0.90. It is mandatory that assessors and researchers should estimate this quantity to add validity and accuracy to the interpretation of their data (Tavakol and Dennick, 2011). Reliability is concerned with the ability of an instrument to measure consistently. It should be noted that the reliability of an instrument is closely associated with its validity (Tavacol *et al.*, 2008).

3.8 Methods for Data Analysis

The activity of data compilation and processing started immediately after the end of the major field work. The questionnaires' were manually edited, coded, and then data

entry and processing was done using SPSS Version 17.0 by two trained assistants. Entered data were cleaned for validation and consistency. Social demographic characteristics of the respondents were analyzed using descriptive analysis and cross tabulation where frequencies and percentages were obtained.

Likert Scale was used to determine the relationship between couples communication, decision-making, education, religion, patriarch and fertility preference as well as contraceptive use. The Likert Scale is the most commonly used scale in quantitative research. It is designed to determine the opinion or attitude of a subject. It contains a number of statements with a scale after each statement.

Thematic analysis was also employed to analyze data emanating from Focus Group Discussions and interviews from elders and DRHCOs. The collected information was analyzed by themes and verbatim quotations were used to illustrate responses on relevant issues and themes. Detailed notes were taken, discussion was audio taped for easy reference in the future. For each FGD outcome of discussion was summarized and used to supplement obtained quantitative information.

F-test was computed in order to compare the variability between and within couples' frequency of communication on family planning issues with the assumption that there is no variability in frequency of communication between couples.

Chi square test was carried out to screen significant independent variables which were further subjected to logistic regression model, and to look for any association between variables with the assumption that there is no association between independent variables and dependent variables.

Binomial logistic regressionwas used to determine the impact of multiple independent variables presented simultaneously to predict membership of one or other of the two dependent variables categories. It predicts the probability that an observation falls into one of the two categories of a dichotomous dependent variable based on one or more independent variables that can be either continuous or categorical. It was performed to ascertain the effect of social network, property ownership, education, employment and ethnicity on contraceptive use and family size (it calculates the probability of success over the probability of failure), in this case probability of using contraceptives (coded as 1) over the probability of not using (coded as 0) and probability of having small family size (1-4 children) coded as 1 over large family size (more than 4 children) coded as 0.

Logistic regression model involves fitting an equation of the following form to the data:

$$\text{logit}(p) = a + b_1x_1 + b_2x_2 + b_3x_{3\ldots} + b_nx_n$$

Where;

Logit (p)=Likelihood ratio (probability) that dependent variable is 1

a=the constant of the equation

b=the coefficient of the predictor variables

x=independent variables

Independent variables included in the model were;

METHUSE - Discussion with social network on the type of FP method used by 1^{st}-4^{th} social network member.

ENC - Whether 1st -4th social network members encouraged respondent on the use of FP methods.

DISCFP - Other than respondent husband/wife, the first to fourth social network member she/he discussed family planning with

OPMATTA - Sex of a first to fourth person who opinion matter other than respondent's husband/wife

MEDISC - Specific FP method respondent discussed with the first to forth social network member

OWHOUSE - Whether respondent own a house

OWLAND - Whether respondent own a land

EMAGRIC - Agriculture is the source of income

CASLABOUR - Casual labour is the source of income

EMPLOYED - Employed

SUKUMA, LUGURU, NGUU and ZIGUA - Respondents ethnicity

3.9 Scope, Limitation and Delimitations of the Study

The scope of this study has been limited to examining the effect of couple's decision on contraceptive use and fertility preference in Kishapu and Mvomero districts only with women participants aged 15-49 and men aged 15-64 with at least one child. Involving more couples from other regions would have increased the possibility for generalizing the results of this study.

One of the problems encountered is that, all the data were collected by visiting respondents in their households during the day; hence most of the respondents found

at home were farmers and those who were working from home. Employed respondents were not found at home during day time on week days. This problem was solved by collecting data even on weekends and those respondents who their work place are nearby, the interview was conducted at their work place whenever possible upon agreement. This problem was encountered mostly in peri-urban settings than in rural settings where the majority of the people are farmers. As for the case of Kishapu, cotton harvesting was almost done, so the majority of the farmers were at home.

Another problem mostly encountered in Mvomero District was the finding of one person at home (that is a husband or a wife) and not both of the partners. This was mostly for the case of business men/women and farmers; but again, arrangement was made to get those who were not at home in later hours, and it worked.

Some men were hesitant to participate in this research as they thought the issue of Family Planning is for women only. Actually some of them were laughing, but after educating them a bit about the whole issue they understood and agreed to participate.

CHAPTER FOUR

GENERAL CHARACTERISTICS OF COUPLES

4.1 Introduction

This chapter describes general characteristics of respondents including respondent's current age, their spouse age, age gap between spouses and marital status. It also gives an explanation on contraceptive behaviour which includes knowledge on family planning methods, ever use of contraceptives, current contraceptive use, and intention to use contraceptives in the future. Couples fertility preference (ideal family size and actual family size) will also be presented and it ends with the conclusion.

4.2 Respondent's Age

Age is an important demographic variable and is the primary basis of demographic classification in vital statistics, censuses and surveys. It is also a very important variable in the study of mortality, fertility and marriage (TDHS, 2005). Moreover, it is one of the important characteristics of population as it is used in the wide range of planning and administrative purposes such as determining the segments of population qualified for voting, school enrolment and pensions (URT, 2004).

All female respondents' ages lied between 15-49 years with the majority having ages between 25-29 years. About twenty two percent (22.5%) of women respondents from Kishapu district were in 35-39 age groups while in Mvomero district about a quarter (25.6%) belonged to 25-29 age group as shown in Table 4.1. Moreover, women at 15 to 49 years age groups are still fertile and hence have a chance to bear many more children in future if their fertility is not controlled. According to (ASRM, 2012), a

woman's best reproductive years are in her twenties and fertility gradually declines in the thirties, particularly after reaching thirty five years. The average age for menopause is normally 49 years, but most women become unable to have a successful pregnancy sometime in their mid 40s. This is true for natural conception as well as conception using fertility treatment, including in vitro fertilization (IVF).

The age of men respondents from both Kishapu and Mvomero districts lied between 15-64 years with the majority (19.5%) being aged between 30-34 years. Men respondents from Kishapu district (25.6%) were between 40-44 years of age and from Mvomero district (25.0%) were between 30-34 years of age (Table 4.1). These results indicate that these men in these groups still have ability to sire more children unless they use various measures to control their fertility.

Table 4.1: Age of the Respondents by Gender (%)

Age	Women			Men		
Category	Total	Kishapu	Mvomero	Total	Kishapu	Mvomero
15-19	03.4	03.1	03.7	00.3	-	00.6
20-24	16.7	18.6	15.2	04.8	03.1	06.1
25-29	21.8	17.1	25.6	12.3	10.9	13.4
30-34	20.8	16.3	24.4	19.5	12.4	25.0
35-39	15.4	22.5	09.8	13.7	14.0	13.4
40-44	13.0	12.4	13.4	17.4	25.6	11.0
45-49	08.9	10.1	7.9	14.0	16.3	12.2
50-54	-	-	-	12.3	10.1	14.0
55-59	-	-	-	02.0	03.1	01.2
60-64	-	-	-	03.8	04.7	03.0
N	**293**	**129**	**164**	**293**	**129**	**164**

In this study women exceeding 49 years were excluded simply because fertility usually declines in women at this age, though sperm quality deteriorates somewhat as men get older, but it generally does not become a problem before a man is in his 60s. ASRM, (2012) asserted that, though not as abrupt or noticeable as the changes in women, changes in fertility and sexual functioning do occur in men as they grow older. Despite these changes, there is no maximum age at which a man cannot father a child, as there are evidences of men in their 60s and 70s having children with younger partners.

Several studies have demonstrated that, the African social cultural values encourage early marriage and early commencement of child bearing for women.Once girls are married, their status infringes upon a range of their rights. Most child brides are burdened with responsibilities as wives and mothers with little support, resources, or life experience to meet these challenges (Greene, 2014). In some countries, according to the World Fertility Survey, women marry as early as age 15 (including Tanzania). The effect of early marriage with little or no contraceptive use generally is to increase fertility.

4.2.1 Awareness of Spouse Age

Getting the correct age from respondents has been a challenge in many researches. Respondents were asked to mention their spouse age, and there were a lot of discrepancy when comparing actual age mentioned by respondents and the age mentioned by the spouse. A good example is results of men spouse's age indicating that there were no women who were above 44 years of age, but when looking in the

actual response from women respondents it shows that 8.9 percent of women respondents had more than 44 years of age, and 5.1 percent of women respondents acknowledged that they didn't know their husband's age.The results based on the men's and women response to the question on their spouse age are shown in Table 4.2.

Table 4.2: Spouse age by Gender, in Kishapu and Mvomero District (%)

Age	Women			Men		
	Total	**Kishapu**	**Mvomero**	**Total**	**Kishapu**	**Mvomero**
15-19	01.0	01.6	00.6	03.8	04.7	03.0
20-24	03.4	03.1	03.7	16.0	13.2	18.3
25-29	12.3	07.8	15.9	23.5	18.6	27.4
30-34	19.8	11.6	26.2	19.8	20.9	18.9
35-39	14.3	12.4	15.9	15.4	22.5	09.8
40-44	15.7	21.7	11.0	21.5	20.2	22.6
45-49	12.3	14.0	11.0	-	-	-
50-54	09.6	11.6	07.9	-	-	-
55-59	03.4	2.3	04.3	-	-	-
60-64	03.1	03.9	02.4	-	-	-
Don't know	05.1	10.1	01.2	-	-	-
N	**293**	**129**	**164**	**293**	**129**	**164**

4.2.2 Spouse Age Differentials

About twenty four percent (24.7%) of respondents in Kishapu District had age gap ranging from 0-4 years, comparing to respondents from Mvomero District with the same age gap who were 40.9 percent (Table 4.3). This is an indication that for this group, women in Mvomero could have more control in matters relating to various issues including family planning issues due to small age gap. According to Tao,

(2009), if the age gap is small between spouses the conflict of interest tends to be small as well. It was also revealed that 75.3 percent of respondents in Kishapu District had spouse age gap of more than 5 years with 29.5 percent having age gap of more than 10 years. Large spouse age gap is correlated with high fertility rates and it is often argued that young wives are pressured by their older husbands to produce more children against their own will (Tao, 2009). This is also supported by Hadad, (2012) who reported that increasing spouse age gap in favour of the husband, means that he will be more dominant on various family decisions. Psychologically a man wishes to marry a young girl in order to keep society's long aged traditions.

The case is slightly different with respondents from Mvomero district where 59.1 percent of respondents had spouse age gap of more than 5 years in which 15.8 percent had spouse age gap of more than ten years. Though the figure is small - compared to that of Mvomero district, but still it is high enough to raise concern and it can be part of the explanation of low use of family planning and high fertility rates in these two districts and Tanzania as a whole. Overall, the largest different in age between spouses was in the age category of greater than ten years (29.5%) in Kishapu as compared to about fifteen (15.8%) from Mvomero district (Table 4.3).

Age differentials between spouses influence fertility through at least three mechanisms. First, there is evidence that fecundability varies slightly with age of the man, and thus the age differential will affect marital fertility. The age differential is also positively associated with the risk of dissolution of marriage through widowhood before the end of women's reproductive years.

Table 4.3: Spouse Age Difference in Kishapu and Mvomero (%)

Spouse Age Gap (Yrs) (Men older than women)	Kishapu		Mvomero	
	Frequency	Percentage	Frequency	Percentage
00	2	01.5	8	04.9
1-2	10	07.7	26	15.9
3-4	20	15.5	33	20.1
5-6	27	21.0	28	17.1
7-8	17	13.2	23	14.0
9-10	15	11.6	20	12.2
>10	38	29.5	26	15.8
N	**129**	**100**	**164**	**100**

Finally, more substantial but less direct effect of the age differentials on fertility and on other variables as well, may come about through its influence on relations between the spouses and the resulting impacts on variables such as marital stability, marital satisfaction, family size preference and contraceptive use (Barbieri and Hertrich, 2005).

4.3 Marital Status

Marriage is the primary indication of the regular exposure of a couple to the risk of pregnancy and therefore it is important for the understanding of fertility. The results of this study indicate that 90.8 percent of women and 89.4 percent of men respondents reported to be in monogamous union. District wise, women respondents from Kishapu who reported to be in monogamous union were 82.2 percent and men 79.8 while from Mvomero women were 97.6 percent and men 97.0 percent. This reported difference - especially for Kishapu district, shows that there are women who are in polygamous marriage without their knowledge. The number of polygamous respondents could be higher than this as in some cases respondents reported to be

married after a husband divorcing his former wife. This kind of information is difficult to check whether the former wife is actually divorced or just separated. This kind of reporting featuresd more in Kishapu district compared to Mvomero district. Further analysis revealed that, the discrepancy in reporting the type of union was more prominent in Kishapu district which was 2.4 percent as comparing to Mvomero district which was 0.6 percent as shown in Table 4.4.

Table 4.4: Respondent's Type of Union (%)

Type of union	Women			Men		
	Total	**Kishapu**	**Mvomero**	**Total**	**Kishapu**	**Mvomero**
Monogamous	90.8	82.2	97.6	89.4	79.8	97.0
Polygamous	09.2	17.8	02.4	10.6	20.2	03.0
N	**293**	**129**	**164**	**293**	**129**	**164**

This could be attributed to large spouse age gap for women in Kishapu district among other factors, which may not give these women freedom to ask their husbands for truth regarding previous marriages. The high number of polygamous marriages in Kishapu district can partly explain the reason for low family planning use and high fertility levels in the district as compared to Mvomero district.

4.4 Couples Contraceptive Behavior

4.4.1 Couples General Knowledge of Contraceptives

Acquiring knowledge about fertility control is an important step towards gaining access to, and then using a suitable contraceptive method in a timely and effective manner. Knowledge of a family planning method is necessary in deciding whether to adopt a contraceptive method and the choice of contraceptive method to use. Respondents were asked to name ways or methods couples can use to delay or

prevent pregnancy. If a respondent failed to mention a particular method spontaneously, the interviewer mentioned it to see if respondent can recognize it. If the method mentioned by the interviewer was not recognized, the interviewer described it in short in order to see whether respondents will recognize it. The respondent was considered to have known a method if reported to have heard of it either spontaneously or after probing.

The results indicated that couples knew one form or another of contraceptive methods. Women respondents mentioned spontaneously that they knew pills, injectables and implants as methods of family planning, but after probing them, the majority reported to know also male condom, female sterilization, female condom, withdrawal, rhythm, male sterilization, IUD and traditional methods (locally used/known methods). The least known methods even after probing were diaphragm, foam and jelly, withdrawal, LAM and male sterilization for Kishapu district and the same methods for Mvomero district with the exception of withdrawal which was well known method in Mvomero district as shown in Table 4.5.

A study conducted in India by Saluja *et al.*, (2009) showed that the knowledge was higher for female sterilization (93.2%) and low for pills (86.8%), IUCD (77.6%), condom (91.2%) and male sterilization (86.2%). Jain *et al.*, (1999) reported highest knowledge for condoms (55.6%) followed by female sterilization (55.4%) in rural area of Meerut which may be due to differences in educational and socio-economic background. In Rwanda, knowledge of all other types of contraception was found to be significantly higher among women than among men, with the oral contraceptive

pill as the most commonly known contraceptive for both women and men (Gabbe *et al.*, 2009).

Traditional methods mentioned by respondents included drinking traditional medicines eg. Nengo, wearing a string of rope holding traditional medicines combined with beads, sealing traditional medicine in a wall or floor of the house, drinking a mixture of ash and water, drinking a mixture of aloevera and neem tree, swallowing castor seeds, sealing monthly blood in a piece of cloth (white, black or red) and put it in a tightly covered tin or snail shell and seal it with soil (you unseal when you are ready to conceive) and putting a piece of cow's skin under a bed. Wearing a string of rope holding traditional medicines combined with beads was mentioned by 48.1 percent of respondents followed by drinking traditional medicine (39.6%) as in Table 4.5.

During women focus group discussions various traditional methods were also mentioned.A female respondent aged 35yrs from Mwakipoya, Kishapu district commented that:

> *"If you want not to get pregnant you mix salt and water until it is very concentrated and drink it after having sex"*.

Men were also aware of these traditional methods though they reported that they are used by women and not men. One male respondent aged 47yrs from Ngeme, Kishapu district commented that, in order to prevent pregnancy:

"A morning after having sex a woman drink a cup of water mixed with ash but alsoa tree called "gembe" , its root are curved to get small pieces like match sticks and these pieces are tied with a string and beads which a woman will wear on her waist all the time. She will remove it when she is ready to have another child."

Table 4.5: Women's Awareness of Various Contraceptive Methods (%)

Family Planning Method	Spontaneous		Prompted		No	
	Kishapu	Mvomero	Kishapu	Mvomero	Kishapu	Mvomero
Female sterilization	22.5	17.7	64.3	70.1	13.2	12.2
Male sterilization	09.3	04.3	47.3	56.1	43.4	39.6
IUD	23.3	43.9	54.3	46.3	22.5	09.8
Injectables	67.4	87.8	25.6	11.6	07.0	00.6
Implants	67.4	61.0	27.1	37.2	05.4	01.8
Pills	70.5	87.2	22.5	12.8	07.0	-
Female Condom	14.0	35.4	67.4	55.5	18.6	09.1
Diaphragm foam and jelly	00.8	03.7	20.2	38.4	79.1	57.9
Rythim	10.9	40.9	51.9	54.3	37.2	04.9
Withdrawal	01.6	16.5	40.3	76.2	58.1	07.3
LAM	18.6	21.3	37.2	35.4	44.2	43.3

Results for men respondents were slightly different from those of women as majority of men reported to know more injectables, pills, female condom and male condom. After giving them a bit of explanation about the methods which were not mentioned promptly, majority of men reported to also know male sterilization, withdrawal and implants. The least known methods were diaphragm, foam and jelly, withdrawal, LAM and male sterilization for Kishapu district and diafragm, foam and jelly, LAM and male sterilization and IUD for Mvomero district (Table 4.6).

Table 4.6: Men's Awareness Responses of Various Contraceptive Methods (%)

Family Planning Method	Spontaneous		Prompted		No	
	Kishapu	Mvomero	Kishapu	Mvomero	Kishapu	Mvomero
Female sterilization	34.9	53.7	51.9	46.4	13.2	11.0
Male sterilization	14.0	25.0	48.8	47.0	37.2	28.0
IUD	31.1	36.6	40.3	37.8	28.7	25.6
Injectables	60.4	78.7	32.4	17.7	07.2	03.7
Implants	44.7	43.9	45.7	48.8	09.6	07.3
Pills	57.3	67.7	36.5	29.3	06.1	03.0
Male condom	51.2	51.2	38.8	43.9	10.1	04.9
Diaphragm, foam and jelly	03.9	04.3	13.2	20.7	82.9	75.0
Rhythm	29.4	47.6	46.4	41.5	24.2	11.0
Withdrawal	04.1	45.1	25.6	50.6	70.3	04.3
LAM	18.6	06.7	37.2	26.2	44.2	67.1

Generally, majority of respondents were not aware of the use of foam and jelly and lactation amenorrhea method (LAM) as means of family planning (Table 4.6). A study carried out in Oman by Islam and Dorvlo (2011), suggested that until1995, lactational infecundability closely followed by marriage pattern played the most prominent part in reducing natural fertility. However, the most recent survey results show that marriage pattern has emerged as the most prominent inhibitor of fertility in Oman.

Bongaarts (1983) demonstrated that, 96 percent of the variance in the duration of postpartum amenorrhea could be explained by breast feeding alone. The longer the women breast feed, the lower is the chance to conceive. This is the natural mechanism for lowering fertility. However, he also noted that post partum amenorrhea phase cannot be lengthened much by lactation beyond two years (Acharya, 2010).

4.4.1.1 Knowledge Index

The index of knowledge of contraceptive methods was prepared based on respondents score and the index ranging from 0 to 11 was obtained. The values of index were further categorized into low, medium and high. Scores of 0 to 3 were considered being low, 4 to 7 medium and 8 to 11 (Table 4.7).

Table 4.7: Level of Knowledge of Family Planning Methods (%)

Scores	**Kishapu (n=129)**		**Mvomero (n=164)**	
	Women	**Men**	**Women**	**Men**
0.00	02.3	-	-	-
1.00	-	02.3	-	-
2.00	00.8	03.1	-	00.6
3.00	02.3	03.9	-	00.6
4.00	03.1	02.3	.6	00.6
5.00	03.1	09.3	.6	02.4
6.00	06.2	08.5	2.4	03.7
7.00	10.9	10.9	4.9	08.5
8.00	13.2	22.5	9.1	17.1
9.00	24.0	23.3	19.5	23.8
10.00	14.0	09.3	30.5	20.7
11.00	20.2	04.7	32.3	22.0
Total	**100**	**100**	**100**	**100**
Respondent's Level of Knowledge				
High	71.4	59.8	91.4	83.6
Medium	23.2	31.0	08.6	15.2
Low	05.4	09.2	-	01.2
Total	**100**	**100**	**100**	**100**

Obtained results revealed that Mvomero women were more knowledgeable (91.4%) on contraceptives than their counterparts in Kishapu district (71.4%). Similar pattern was observed to men as Mvomero men were more knowledgeable on contraceptives (83.6%) than Kishapu men (59.8%) as in Table 4.7.

4.4.2 Couples Contraceptive use Status

This section gives results as to whether the respondents have ever used contraceptive method(s) before, whether they are currently using any methods of contraception and whether they intended to use contraceptives in the future.

4.4.2.1 Ever use of Contraceptive Methods

The ever use of contraceptives in this case was generally low to medium in the two districts. In general among women used injectables (47.8%), followed by pills (28.7%). In Mvomero (63.4%) of women reported to have used injectables as compared to 27.9 percent of women respondents from Kishapu, followed by pills (36.6% and 18.6%) respectively (Table 4.8).

This is probably due to accessibility and availability of these methods among other reason. But again, some other social and cultural factors could have effect on the extent of contraceptive use as explained by Stover *et al*., (2005), that the use of modern contraceptives is highest where the availability and accessibility of the method is high. However, Kessy and Mwageni (2005) reported that, choice of the method is sometimes a result of persuasive language of providers.

Table 4.8: Percentage Distributions of Respondents ever use of Contraceptives

Family Planning Method	Ever Use of Contraceptives					
	Women			Men		
	Total	Kishapu	Mvomero	Total	Kishapu	Mvomero
Female sterilization method	06.5	09.3	04.3	-	-	-
Male sterilization method	-	-	-	00.3	00.8	-
IUD	01.4	00.8	01.8	-	-	-
Injectables	47.8	27.9	63.4	-	-	-
Implants	08.9	08.5	09.1	-	-	-
Pills	28.7	18.6	36.6	-	-	-
Female condom	09.6	05.4	12.8	-	-	-
Male condom	-	-	-	37.9	25.6	47.6
Diaphragm, foam and jelly	00.3	-	00.6	-	-	-
Rythim	08.5	01.6	14.0	-	-	-
Withdrawal	-	-	-	34.5	07.0	56.1
Traditionalmethods	03.1	05.4	01.2	-	-	-
LAM	20.1	21.7	18.9	-	-	-
N	**293**	**129**	**164**	**293**	**129**	**164**

Male condom (37.9%) and withdrawal (34.5%) were the contraceptive methods reported by the majority of men. The wide use of withdrawal is perhaps related to it being natural and thus traditional to most communities. It does not require specific clinical services as individuals can easily manage it and condoms are widely available. These results were different from those reported by Aryeetey *et al.,(*2010) that, most respondents (67%) reportedever use of any family planning method with the exception of the male condom, injectables and oral contraceptive, ever use prevalence of any other method was very low (less than 10%).

A comparison between knowledge and past use suggests that there is a considerable difference, even among the most popular known methods such as injections, pills, condom and withdrawal. Therefore, knowledge of the methods alone is not a

guarantee for contraceptive use. This finding did not differ with the ones found in the study conducted in South Africa by Maharaj and Cleland (2005), which found out that knowledge of condom was almost universal. Ninety percent of respondents had heard of the method and knew a potential source of supply but only ten percent of respondents reported to be using condoms occasionally.

4.4.2.2 Current use of contraceptive methods

The level of current contraceptive use of family planning is one of the indicators most frequently used to assess the success of family planning activities. In order to get this information respondent were asked whether they are currently using any contraceptive methods and their responses are summarized in Table 4.9.

Nearly half of the women respondents from Kishapu district (49.6%) reported to be using contraceptives, mostly female sterilization (13.2%), injectables (11.6%) and implants (10.1%) and Mvomero district were injectables (28%), pills (14.6%) and rythim (10.4%). More than sixty percent of women respondents from Mvomero district (67.7%) reported to be using contraceptives especially, injectables (28%), pills (14.6%) and rhythm (10.4%) as in Table 4.9.

Generally, more than a half of all women respondents (59.7%) were using contraceptives. The least used contraceptives for Kishapu were diaphragm, foam and jelly and rhythim and for Mvomero were diaphragm, foam and jelly and LAM (Table 4.9).

Table 4.9: Current Contraceptive use (%)

Family Planning Method	Current Use of Contraceptives					
	Women			Men		
	Total	Kishapu	Mvomero	Total	Kishapu	Mvomero
Female sterilization method	08.9	13.2	05.5	-	-	-
Male sterilization method	-	-	-	01.0	00.8	01.2
IUD	00.7	00.8	00.6	-	-	-
Injectables	20.8	11.6	28.0	-	-	-
Implants	05.8	10.1	02.4	-	-	-
Pills	10.6	05.4	14.6	-	-	-
Female condom	02.4	01.6	03.0	-	-	-
Male condom	-	-	-	07.5	10.1	05.5
Diaphragm, foam and jelly	00.7	01.6	-	-	-	-
Rythim	06.5	01.6	10.4	-	-	-
Withdrawal	-	-	-	04.4	02.3	06.1
Traditional methods	-	-	-	-	-	-
LAM	01.4	03.1	-	-	-	-
None	40.3	50.4	32.3	32.1	39.5	26.2

Further results show that, the number of respondents currently using contraceptives is lower than those who have used contraceptives in the past showing a drop in the use for almost all the methods. This shows that there is a considerable proportion of respondents who discontinue using contraceptives and the discontinuation rate differ with the methods.

A study conducted by Mtae (2007) in Morogoro Municipality reported that, current contraceptive use was found to be lower than the past use with all the methods showing a drop in the use with the exception of implants which showed a slightly increase. These results are also supported by eighteen month study done in Egypt by Tolley *et al.,* (2005), which revealed that by the end of the study ninety percent (90%) of injectable users and fifty two percent (52%) of IUD users and nineteen percent (19%) of implant users discontinued using the method.

More than sixty percent of men reported to be using contraceptives (67.9%) mostly male condom and withdrawal. Men from Kishapu district reported to use more male condom (10.1%) and withdrawal (6.1%) for Mvomero district (Table 4.9). Just like women, there is a noticeable drop in the use comparing past use and current use. There are variations in the type of contraceptive methods that are practiced by men in the study area with vascectomy being least used (Tuloro,*et al.,* 2006).

The major reasons reported by respondents for discontinuation rate differ with the methods but generally most reported reasons were side effects which include heavy, painful and irregular periods, fear of getting cancer or deformed children and unavailability when needed as reported by some respondents during group discussion:

> *"Many men do not want their wives to use contraceptives because of the side effects they have like stomachache and headache (Mvomero woman aged 32yrs)"*

Fear of side effects due to misinformation was clearly seen to some respondents as commented by this respondent:

> *"Some women believe that if they will use for example norplants the sticks will be dissolved and disappear, and pills will make them give birth to disabled children as they will be accumulated in the womb, and pills also cause irregular painful bleeding (Kishapu woman aged 45yrs)"*.

Some respondents also reported that, some women do not use family planning because they believe once they use family planning they will not be able to give birth in future. Male respondents also supported the idea of women not to use family planning methods especially modern contraceptive methods due to fear of side effects but some respondents also support the use of family planning methods, as commented by Mvomero man aged 36yrs:

> *"Sometimes it depends, if a woman face difficulties in getting pregnant she should not use family planning methods but for those of whom getting pregnant is not difficult, they should use family planning methods otherwise they will give birth every year and that is not good for the health of the mother and children (Mvomero man aged 36yrs)"*.

According to Mtae (2007), major reasons for discontinuation reported by respondents were changes in menstrual bleeding. Women reported having changes in the duration and intensity of bleeding after initiating method use and yet others experience temporary amenorrhea. Other reasons mentioned were that modern contraceptives especially pills can cause cancer. TDHS (2005) reported that, more than one third of

family planning users in Tanzania discontinue using the method within twelve months of starting its use. Four percent of users stop using as a result of method failure, especially withdrawal. Eight percent due to desire to become pregnant and nine percent switch to another method, especially pills and injectables users due to fear of side effects.

A study conducted in Jordan reported that many women discontinue contraceptive use within one year of initiating a method. The discontinuation of the use of family planning decreased from 48.9 percent in 1997 to 39.7 percent in 2007 but in 2009 rose to 45.1 percent. More than a half of the women discontinue using injectables, male condoms, and oral contraceptives within one year. The method with lowest discontinuation rate was IUD (15%). The major reasons that women discontinue use of a contraceptive method are a desire to become pregnant, method failure (causing unintended pregnancy), desire for a more effective method, side effects, and health concerns (JPFHS,2007 and 2009).

Evidence from West Africa, China and India suggest that, rates of discontinuation are lower among women who receive more counseling or information (Rama Rao *et al.,* 2003*).* In Mexco (Ponce *et al.,* 2000) suggest that, providing potential contraceptive users with comprehensive information about family planning methods has a significant effect on their subsequent choice of a method.

Respondents were asked to give their views on the choice of the contraceptives they are currently using and the majority reported that they are using a particular method because the method is safe and easy to use, they were advised (by a nurse and mother

in law) to use it, not expensive, and fear of side effects of other methods. Some respondents reported to have been using contraceptives without their husband's knowledge. This is because their husbands feel insecure, as they think their wives will have extra marital relationships outside their marriages. They further reported that, it is much easier especially when you use injection as it is not easy for the man to notice. Respondents reported that the use of contraceptives is very low and most women are using without their spouses knowledge as commented by this respondent;

> *"It is okay to use family planning methods but the number of people using contraceptives is small, the big number of those who are using contraceptives, use it covertly without their husbands' knowledge…… We also hide them in the cooking flour among other places, as men do not cook, it's not easy for them to find it; we just know ourselves... Some men do not know how to read, so even if they will see a pack of pills accidentally they will not know that they are contraceptive pills, so the woman can just say they are medicine for a certain disease (Kishapu woman aged 30yrs)".*

Some men showed great concern of women using contraceptives without permission from their husbands. Some men reported to know that there are women who use contraceptives without their husbands consent as commented by this respondent:

> *"Most men do not support the use of family planning methods, so when the woman will use it without her husband permission, once the husband finds out that his wife cannot get any more children he can just marry another woman who can bear him more children.(Kishapu man aged 51yrs)"*

Some male respondents had different views supporting the use of family planning methods but at the same time concerned about the behavior of women once using contraceptive methods as commented by this respondent:

> *"People have different views, some think it is okay for a woman to use contraceptives but others think that a woman may misbehave and become a prostitute if she uses contraceptives and so some women are not allowed to use contraceptives by their husbands because of this (Mvomero man aged 60yrs)".*

4.4.2.3 Intention to use Contraceptives in the Future

All respondents, irrespective of their contraceptive status, were asked about their intention to use contraceptive methods in future. The majority of respondents (78.1 percent women and 77.8 percent men) reported to be ready to use contraceptives in the future. Women respondents from Mvomero district (86%) and men (82.9%) intend to use contraceptives in future as compared to those from Kishapu where women were 67.2 percent and men 71.3 percent intend to do so.

These results give a promising future of contraceptives use if appropriate measures will be taken, but it also gives an indication of high demand of education on family planning and reproductive health especially more to Kishapu district. A study conducted in Morogoro Municipality by Mtae (2007) revealed that 67.7 percent of respondents reported readiness to use contraceptives in the future and 88 percent were very likely to do so.

Table 4.10: Intention to use Contraceptives in Future (%)

Response	Intention to use Contraceptives					
	Women			Men		
	Total	**Kishapu**	**Mvomero**	**Total**	**Kishapu**	**Mvomero**
Yes	78.1	67.2	86.0	77.8	71.3	82.9
No	14.8	18.5	12.2	16.0	17.8	14.6
Don't know	07.1	14.3	01.8	06.1	10.9	02.4
N	**283**	**119**	**164**	**293**	**193**	**164**
Likelihood to use contraceptives						
Very unlikely	06.7	07.7	06.1	02.7	01.6	03.7
Unlikely	00.7	-	01.2	13.0	16.3	10.4
Uncertain	12.3	16.3	09.8	11.9	12.4	11.6
Likely	11.6	09.6	12.8	32.1	12.4	47.6
Very likely	68.7	66.3	70.1	40.3	57.4	26.8
N	**268**	**104**	**164**	**293**	**129**	**164**

Further analysis was carried out in order to determine the likelihood of respondents to use contraceptives in the future, and it was found out that the majority of women and men (80.3 percent and 72.4 percent) respectively are likely to use contraceptives in the future. The majority of women from Kishapu district (75.9%) and Mvomero district (82.9%) are likely to use contraceptives in future compared to men from Kishapu district (69.8%) and men from Mvomero district (72.4%). This means that, apart from Kishapu district having low contraceptive use at the moment, more respondents intend to use contraceptives in future, and this was the case for respondents from Mvomero district as well. Findings are displayed in Table 4.10.

4.5 Family Size Preference

4.5.1 Ideal Family Size

Interviewed respondents were asked to mention the number of children they would like to have in their life time. Majority of respondents reported to be in favour of large family size of more than five children with some respondents preferring more than ten children as reported by 66.2 percent of women and 64.1 percent of men respondents. Specifically Kishapu women (83%) and men (82.2%) were in favour of large family size as compared to their counterparts from Mvomero who were women (53%) and men (50%). The mean ideal family size is 3.1 for men and 3 for women (Table 4.11).

In a study conducted in Vietnam, some respondents expressed a clear sense that too many children are a burden, that the costs of raising children is increasing, and that the need to invest in the future implies financial responsibilities which require small family size as reported by WHO (2006),results are displayed in Table 4.11.

Table 4.11: Stated Ideal Family Size (%)

Scores	**Women**			**Men**		
	Total	**Kishapu**	**Mvomero**	**Total**	**Kishapu**	**Mvomero**
1-2	02.7	-	04.9	02.7	01.6	03.7
3-4	31.1	17.1	42.1	33.1	16.3	46.3
5-6	44.4	48.1	41.5	35.8	34.9	36.6
7-8	12.6	19.4	07.3	11.6	17.8	06.7
9-10	06.8	12.4	02.4	09.9	15.5	05.5
More than ten	02.4	03.1	01.8	06.8	14.0	01.2
N	**293**	**129**	**164**	**293**	**129**	**164**

During focus group discussions for both men and women, there was a mixed opinions on appropriate ideal family size as different views were aired but all in all their comments indicated that the sense of having small family size is starting to linger into people's mind though slowly as they had different number of children that they consider small. Some of the comments given by respondents were:

> ***"****In the past, to have many children it was okay and it was something that was expected, but life nowdays is very expensive so, it is better to have at least 5 or 6 children. I can think of using contraceptives after having six children, not less than that (Kishapu woman aged 40yrs)"*

Another respondent commented on the same:

> *"Four children are enough for me as life is difficult now days. The children I have I cannot even take them to secondary school and when they get sick, it is not easy to take a good care of them, leave alone feeding them properly (Mvomero woman aged 32yrs)"*

Such comments were observed from men respondent as well as commented by this respondent:

> *"Most people prefer a small family of 4-5 because it is easy to take care of them especially now, but in the past people were after large families of 10-12 (Kishapu men aged 41yrs)"*

4.5.2 Actual Family Size

Respondents were asked to mention the number of daughters and sons they have had, then the total number of children was calculated. Women respondents from Kishapu

district with 3-4 children (29.5%) were the majority followed by those with 5-6 children (27.1%), but for women respondents from Mvomero district the majority (42.1%) were those with 3-4 children followed by (37.8%) who had 1-2 children. The results for men respondents from Kishapu district revealed that the difference between men with 3-4 and 5-6 children were small 24.8% and 24.0% respectively but it was different for respondents from Mvomero district as 40.2% had 1-2 children followed by those with 3-4 children (32.3%) as shown in Table 4.12.

Table 4.12: Stated Actual Family Size (%)

Scores	Stated Actual Family Size					
	Women			Men		
	Total	**Kishapu**	**Mvomero**	**Total**	**Kishapu**	**Mvomero**
1-2	31.4	23.3	37.8	31.4	20.2	40.2
3-4	36.5	29.5	42.1	29.0	24.8	32.3
5-6	19.8	27.1	14.0	20.5	24.0	17.7
7-8	08.9	13.2	05.5	10.6	14.0	07.9
9-10	02.7	05.4	00.6	04.4	08.5	01.2
More than ten	00.7	01.6	-	04.1	08.5	00.6
N	**293**	**129**	**164**	**293**	**129**	**164**

Generally, the majority of women respondents (36.5%) had 3 or 4 children while majority of men respondents (31.4%) had 1 or 2 children. This discrepancy perhaps is caused by some women getting married while they already have kids, and this is especially for 3 or 4 children as the response for 1 or 2 children was the same for both women and men (Table 4.12).

For the cases where men reporting are higher than women's especially from five children onwards, could be because of polygamous marriages and also these men perhaps they are not in their first marriage as divorce rate and remarrying after divorce was also reported to be high but again could be due to poor memory lapse especially if the family size is big.

4.6 Chapter Summary

The importance of age in this study cannot be ignored as all the respondents were in their reproductive years, with most women having between 25-29yrs and men 30-34yrs. Women and men from Kishapu were much older than their respondents from Mvomero 35-39 yrs for women and 40-44yrs for men. Discrepancy was noted on reporting spouse's age, and this was no surprise as it has been reported in various studies that age misreporting is common. There were age differences between spouses with men being older than women. Age gap was found to be bigger in Kishapu district (more than ten years) as compared to Mvomero district (three to four children). All respondents were married and had at least one child with the majority being in monogamous marriage while discrepancy was observed on couple's responses with many men reporting that they are in polygamous marriage than women.

Knowledge of at least one contraceptive method was universal with injectables and pills as most known contraceptive methods for both couples. Ever use was found to be higher than current contraceptive use especially for most known methods (injectables and pills) and more so in Mvomero than Kishapu. Men reported to be

using contraceptives more than women, though more women and men from Mvomero were using contraceptives than Kishapu districts. Many more respondents reported to have the intention to use contraceptives in the future especially more women as compared to men and more couples from Mvomero than Kishapu district.

CHAPTER FIVE

THE IMPACT OF SOCIAL NETWORK ON COUPLES DECISION ON FERTILITY PREFERENCE

5.1 Chapter Overview

In this chapter information on respondents social network regarding the relationships, contraceptive method used, and whether they were encouraged or discouraged on the use of contraceptives will be presented. Furthermore, information on how respondents came to know that social network membersare using contraceptives will also be discussed.

5.2 Identifying Social Network Members

In order to get information regarding social network and its effect in contraceptive use adoption, respondents were asked to mention at least four people - apart from their husbands/wives, whose opinion matters and who can discuss personal matters with them (for instance about children, work, church/mosque). The results for women showed that almost ninety sixpercent of respondents (96.2%) had at least one person other than their husbands whom they sought opinion. The respondents from Kishapu district were 96.1 percent and from Mvomero districts were 96.3 percent (Table 5.1). The results for men also indicated a high percent (88%) of individuals who have one or more form of social network with Mvomero having more respondents (93.9%) than Kishapu (82.9%). The remaining portion of respondents did not trust opinions of other people apart from their husband. It can be noted that generally, women had a slightly higher social networks than men (Table 5.1).

Table 5.1: Distribution of Social Network Members other than Spouses (%)

Response	Women			Men		
	Total	**Kishapu**	**Mvomero**	**Total**	**Kishapu**	**Mvomero**
Yes	96.2	96.1	96.3	88.4	82.9	93.9
No	3.8	3.9	3.7	11.6	17.1	06.1
N	**282**	**124**	**158**	**261**	**107**	**154**

Respondents were further asked to tell the sex of their social network members, and it was noted that most women respondents had more females than males network members in their social network. This signified that women do trust their fellow women more regarding various important issues, though few men were also mentioned (Table 5.2).

Table 5.2: Sex of Social Network Members whose Opinions Matters (%)

Sex	Women							
	1st person		**2nd person**		**3rd person**		**4th person**	
	Kishapu	**Mvomero**	**Kishapu**	**Mvomero**	**Kishapu**	**Mvomero**	**Kishapu**	**Mvomero**
Male	32.3	24.1	32.4	30.1	29.9	28.6	32.1	31.7
Female	67.7	75.9	67.6	69.9	70.1	71.4	67.9	68.3
N	**124**	**158**	**111**	**143**	**97**	**112**	**84**	**82**

Chi-square for current contraceptive use = 5.643[a] significant at p<.05

Sex	Men							
	Kishapu	**Mvomero**	**Kishapu**	**Mvomero**	**Kishapu**	**Mvomero**	**Kishapu**	**Mvomero**
Male	97.2	90.3	90.0	84.8	88.8	81.4	78.6	82.3
Female	02.8	09.7	10.0	15.2	11.2	18.6	21.4	17.7
N	**107**	**154**	**100**	**125**	**89**	**102**	**70**	**62**

This observation conform to what was reported by Kodzi and Johnson, (2009) that, a woman is more likely to adopt the reproductive behavior of other women in her social network and her fertility decision would have to include considerations of the desires of her spouse. According to Bongaarts and Watkins, (1996); Montgomery and Casterline, (1996); Kohler, (2001) and Rossier and Benardi (2010) social interactions tends to influence reproductive and contraceptive behavior through social learning and social influence processes.

Social learning refers to the acquisition of information from others, whereas social influence refers to the power that individuals exercise over each other through authority, deference, and social conformity pressures (Montgomery and Casterline, (1996) and Bongaarts and Watkins (1996) added a third dimension, which is closely related to social learning, i.e. the joint evaluation of meaning and information exchanged in a particular context. In this regard men and women do discuss on contraceptive use either at individual level or in groups, though the final decision on what method one is to use will depend among other on spousal consent.

Among men, the results showed that most men had more male social network members in their social network than females, indicating that men also tend to trust their fellow men more than women, but also few females were mentioned (Table5.2). While Agadjanian, (2001) and Behrman, *et al.*, (2002), agree that men's interactions within their personal networks are important for contraceptive approval and subsequent use, a study using data from southern Ghana found no effect for men's interactions on their partner's contraceptive use (Casterline *et al.*, 2002 and

Agyeman, 2002). However, some consider men's reported contraceptive use as the outcome of interest rather than interactions (Behrman *et al*., 2002).

Statistically, the results showed that for women there was significant association (p=.013) between sex of the social network member who opinion matters other than spouse and respondents current contraceptive use as in Table 5.2 but the association was not statistically significant for the intention to use contraceptives in the future as well as the family size.

5.3 Identifying Influence Mechanisms

In order to get more details on women's social network, respondents were asked to tell the kind of relationship they have with their social network members. A wide range of relationship was reported within network, but almost a half of the respondents reported to trust more their close relatives (mothers, fathers, brothers, sisters, sons and daughters) followed by distant relatives (grandparents, in laws, uncles, aunts and nephews) as presented in Table 5.3.

Table 5.3: Respondents Relationships with Social Network Members (%)

Relationship	**Women**							
	1st person		**2nd person**		**3rd person**		**4th person**	
	Kishapu	**Mvomero**	**Kishapu**	**Mvomero**	**Kishapu**	**Mvomero**	**Kishapu**	**Mvomero**
Friend	20.2	18.9	23.6	11.1	22.9	16.8	19.8	10.7
Close relatives	44.4	50.3	35.5	49.4	37.4	46.9	40.7	48.9
Distant relatives	29.9	20.7	30.8	25.7	27.2	26.6	30.8	39.1
Others	05.6	10.1	10.0	13.9	12.5	9.7	08.6	9.5
N	**124**	**159**	**110**	**144**	**96**	**113**	**81**	**84**
Relationship	**Men**							
	Kishapu	**Mvomero**	**Kishapu**	**Mvomero**	**Kishapu**	**Mvomero**	**Kishapu**	**Mvomero**
Friend	65.4	46.7	59.6	43.1	58.6	41.7	53.0	50.0
Close relatives	20.3	29.6	24.2	31.8	25.1	35.4	31.8	18.4
Distant relatives	6.8	8.6	09.0	10.6	5.6	05.0	12.0	16.7
Others	7.7	15.2	7.1	13.8	10.3	14.5	03.0	15.0
N	**104**	**152**	**99**	**123**	**87**	**96**	**66**	**60**

These results are an indication that apart from their husbands, women tend to trust more and seek advice from their close relatives and distant relatives before talking to their friends. The least reported group was others (neighbours, pastors, sheikhs and nurses).

As for men, the results showed that friends and close relatives were highest reported to be people whose opinion matters to respondents other than their wives. This means, unlike women, men tend to turn to their friends first before turning to their close relatives for various important issues. The pattern was the same in both districts (Table 5.3). During focus group discussion it was revealed that in addition to getting advices from family members, community members do engage in discussion on various issues including family planning especially when the family is too big. Sometimes the discussion among social network members would dwell on concern when a woman gives birth continuously. A man from Kishapu had this opinion:

> *"A man may be advised to leave his wife if she gives birth continually and goes to marry another wife so that his first wife can rest a bit (Kishapu man aged 59).*

The discussion usually occur when drinking or selling local brews or when working, when visiting each other, or when they meet on the road but, this occur mostly to people of nearly the same age and those who can trust each other.

5.4 Network Members and Discussions on Contraceptive Use

Nearly a quarter of women respondents (26.3%) did discuss about family planning in the past year as compared to 13.7 percent of men. Nearly sixty percent of women

respondents from Kishapu (59.7%) and 40.2 percent from Mvomero reported to discuss while, nearly a third of men respondents (31%) were from Kishapu and 28.7 percent from Mvomero districts (Table 5.4).

Women seem to discuss more than men on contraceptive use, perhaps because of their dependence on informal networks for information on fertility control. This demonstrated that social networks overall provide information mainly through social learning rather than by social influence (Behrman, *et al*., 2002; Buono, *et al*., 2000; Rutenberg and Watkins, 1997; Valente, *et al*., 1997). For a number of reasons, the adoption of modern contraception may be strongly influenced by diffusion effects. Where modern contraception is still new, social learning may help to establish the properties of contraceptive methods themselves, their levels of efficacy, where they may be obtained, theassociated monetary and social costs, and the potential side effects of use (Montgomery, *et al.*, 2001).

Table 5.4: Respondents Discussion on FP use in the Past Year (%)

Response	**Women**			**Men**		
	Total	**Kishapu**	**Mvomero**	**Total**	**Kishapu**	**Mvomero**
Yes	26.3	59.7	40.2	13.7	31.0	28.7
No	73.7	40.3	59.8	86.3	69.0	71.3
Total (N)	**293**	**129**	**164**	**293**	**129**	**164**

Chi-square for men current contraceptive use = 14.165[a] significant at p<.05
Chi-square for women intending to use contraceptives in future = 11.461[a] significant at p<.05

Obtained results for women indicated a strong association (p=.003) between respondents discussion on contraceptive use in the past year and intention to use

contraceptives in the future but not for current contraceptive use and family size. However, the results for men statistically showed highly significant association (p=.000) between respondents discussion on contraceptive use in the past year and current contraceptive use but not for intention to use contraceptives in the future or family size as in Table 5.4

Generally, the number of respondents who reported to have discussed about family planning in the past 12 months was very low as only 29.7 percent of respondents reported to have discussed (Table 5.4). It thus, appeared that social net work members have been discussing issues other than contraceptive use. Avogo*et al.,* (2008) suggested that social networks particularly men's networks may start out as conservative and dismissive of the idea of controlling childbearing but, as new ideas emerge about the benefits of having fewer children, these networks may spread information and help to transmit ideals about smaller family sizes, thereby leading to the adjustment of couple's fertility intentions.

A study conducted in rural Kenya by Musalia (2005) found that networks were influential in contraception adoption, and Godley, (2001) emphasized that having ties outside one's environment was found to be very important in increasing the use of contraception in Thailand.During focus group discussions, men agreed that social networking existed and regardless of place when two or three people meet, they do discuss various issues if they want to, especially when they go to play football, in the "vilinge" (places where people meet and pass time), village centers, when visiting

each other at home. Some respondents had different views as opinionated by this respondent:

> *"Many women do not discuss about family planning, as they don't trust each other. They fear that the other person you are discussing with can go and tell her husband about it, and that can cause a big trouble (Kishapu woman aged 41yrs)"*

The results in Table 5.5 show that for those who reported to have discussed about contraceptive use in the last twelve months, were more comfortable to discuss issues related to contraceptive use with their friends and close relatives. However, there was a slight disparity between districts, in that women from Kishapu district discussed more with their friends and close relatives while, those from Mvomero district mostly reported close relatives followed by friends. The results for men were different from women as most men reported to discuss about contraceptives mostly with their friends than the rest. The same pattern was observed in both districts. This means men respondents trust friends more in discussion about matters related to contraceptive use. This was supported by one respondent from Mvomero who said:

> *"Men do discuss about family planning, but we discuss mostly family planning methods used by women. These discussions mostly take place when we are farming, walking, while drinking local brew etc so long as there is a bit of privacy and the ones discussing trust each other"*

The results for women showed that there was a highly significant association statistically (p=.000) between relationship of respondent to the other person who discussed about contraceptive use in the past 12months and family size, as well as

with the intention to use contraceptives in the future but not with the currentcontraceptive use as in Table 5.5 Results for men also showed highly significant association statistically (p=.000) between relationship of respondent to the other person who discussed about contraceptive use in the past 12months and family size but not with contraceptive use.

Table 5.5: Respondents' Relationship with Social Network Member (%)

Relationship	Women							
	1st person		2nd person		3rd person		4th person	
	Kishapu	Mvomero	Kishapu	Mvomero	Kishapu	Mvomero	Kishapu	Mvomero
Friend	38.5	34.8	41.2	25.0	38.1	50.0	34.3	53.8
Close relative	34.6	40.9	33.3	45.0	31.0	40.9	37.1	38.5
Distant relative	23.1	12.1	17.6	12.5	21.4	-	23.0	07.7
Others	3.9	12.1	07.8	17.5	09.5	09.1	05.7	-
N	**78**	**66**	**51**	**40**	**42**	**22**	**35**	**13**
Chi-square for family size = 78.682 [a] significant at p<.05 Chi-square for intention to use contraceptives in future the =39.318[a]significant at p<.05								
Relationship	**Men**							
	Kishapu	Mvomero	Kishapu	Mvomero	Kishapu	Mvomero	Kishapu	Mvomero
Friend	67.5	68.0	68.0	67.7	61.1	64.3	63.6	62.5
Close relative	22.5	10.0	12.0	06.5	11.1	7.1	18.2	25.0
Distant relative	7.5	12.0	04.0	9.7	11.2	28.6	09.1	-
Others	12.5	13.2	16.0	13.0	16.8	-	09.1	12.5
N	**40**	**49**	**25**	**29**	**18**	**16**	**11**	**08**
Chi-square for family size= 128.244[a] significant at p<.01								

Discussion about contraceptive use alone was not enough. It was also necessary to determine whether during the discussion, network members discouraged or

encouraged respondent to use contraceptives. Obtained results revealed that overwhelming majority of social network members encouraged women respondents to use contraceptive. This is an indication that, the decision to use contraceptives for women sometimes is influenced by network members who themselves use contraceptives and those who have positive attitude towards contraceptive use (Table 5.6).

The results from men were not much different from those of women as the vast majority of social network members in all categories did encourage respondents to use contraceptives. This signifies that encouragement from social network members who have positive attitude towards contraceptive can have positive influence to non users (Table 5.6). A study conducted in Ghana by Avogo *et al*. (2004) showed that most men commonly report positive assessment of family planning and encouragement to use modern contraception among social network partners.These exchanges appear to have a strong impact on men's views of contraception because of the pressure for conformity that they generate. It further shows that men's exposure to reproductive and contraceptive discussions within their social networks exert a significant effect on their partners' contraceptive use, even though the magnitude of these effects is smaller than that of women's social interaction.

In this regard, encouragement to use family planning from their respective social networks affects women's contraceptive use by stimulating spousal interaction on reproductive matters and fostering their agreement on benefits of family planning (Avogo and Agadjanian, 2008; Montgomery *et al*., 2001). Avogo and Agadjanian (2008) reported that the pattern displayed on the relationship indicated that, the

selection of network partner is more important than couples' background characteristics.

Table 5.6: Respondents Encouragement on the use of FP by Social Network (%)

	Women							
Response	**1st person**		**2nd person**		**3rd person**		**4th person**	
	Kishapu	**Mvomero**	**Kishapu**	**Mvomero**	**Kishapu**	**Mvomero**	**Kishapu**	**Mvomero**
Encourage	98.7	100.0	98.0	100.0	100.0	100.0	97.1	100.0
Discourage	01.3	-	02.0	-	-	-	02.9	-
N	**78**	**67**	**51**	**40**	**42**	**22**	**35**	**12**
Response	**Men**							
	Kishapu	**Mvomero**	**Kishapu**	**Mvomero**	**Kishapu**	**Mvomero**	**Kishapu**	**Mvomero**
Encourage	100.0	95.7	100.0	93.3	94.4	92.9	84.6	85.7
Discourage	-	4.3	-	6.7	5.6	7.1	15.4	14.3
N	**39**	**47**	**26**	**30**	**18**	**14**	**13**	**07**

It was further reported that encouragement for family planning from network partners was somewhat higher among women than men - 21 percent versus 18 percent respectively. The study also reported a stronger association of approval of family planning from social network members for men than for women and that, conversation about modern contraception is far more often negative than positive, with stories about extreme negative health repercussions of contraceptives often dominating the discussion (Rutenberg and Watkins 1997, Adongo *et al.*, 1997) as cited by Avogo and Agadjan (2008).

Table 5.7 givesthe results as to whether respondents who reported to have social network members encouraged them to use contraceptives, they really did so. Nearly sixty percent of women respondents in all categories reported to be using

contraceptives and this were few compared toeight percent of men respondents in all categories who were reported to be using contraceptives. This is an indication that encouragement from social network members has some effect on respondent contraceptive use status, much more to men than women.

Table 5.7: Encouragement to use Contraceptives by Social Network Members (%)

Response	Women				Men			
	1st person	2nd person	3rd person	4th person	1st person	2nd person	3rd person	4th person
Yes	62.7	58.9	56.3	56.5	84.5	85.2	80	82.4
No	37.3	41.1	43.7	43.5	15.5	14.8	20	17.6
N	**142**	**90**	**64**	**46**	**84**	**54**	**30**	**17**

Chi-square for women intention to use contraceptives in the future=10.345[a] significant at p<.05
Chi-square for men current contraceptive use= 19.107[a] significant at p<.05
Chi-square for men intention to use contraceptives in the future= 19.107[a] significant at p<.05

According to Avogo and Agadijanan (2008), the encouragement received by men influences subsequent contraceptive adoption only through spousal interaction, while the latter encouragement received by women affects contraception adoption both through spousal interaction and directly to individual women.

Obtained results for women showed that there was statistically significantassociation (p=.003) between respondent's encouragement to use contraceptives by social network members and intention to use contraceptives in the future but not for current contraceptive use or family size. The results for men indicated that, the association between respondent's encouragement to use contraceptives by social network

members and contraceptive use were highly significant statistically (p=.000 and p=.007) as in Table 5.7. The results were not statistically significant for family size. The most discussed contraceptive methods which respondents discussed with network members were injectables, pills and implants. Generally, withdrawal and traditional methods were not discussed by women respondents at all (Table 5.8).

Table 5.8: Contraceptive Methods Discussed by Women and their Social Network (%)

Contraceptive method	1st person		2nd person		3rd person		4th person	
	Kishapu	**Mvomero**	**Kishapu**	**Mvomero**	**Kishapu**	**Mvomero**	**Kishapu**	**Mvomero**
F/sterilization	11.5	03.0	11.8	-	09.5	-	05.7	-
M/sterilization	03.8	-	-	-	-	-	-	-
IUD	05.1	06.0	07.8	02.5	-	13.6	05.7	08.3
Injectables	41.0	55.2	31.4	52.5	26.2	54.5	17.1	41.7
Implants	17.9	04.5	31.4	-	33.3	04.5	22.9	08.3
Pills	12.8	22.4	13.7	42.5	23.8	22.7	28.6	25.0
Condom	03.8	03.0	-	-	02.4	04.5	14.3	08.3
Diaphragm	01.3	03.0	-	-	02.4	-	-	-
Rhythm	02.6	03.0	03.9	02.5	02.4	-	-	-
Withdrawal	-	-	-	-	-	-	-	-
Traditional	-	-	-	-	-	-	-	-
N	**78**	**67**	**51**	**40**	**42**	**22**	**35**	**12**

The finding from the current study are in conformity with what was reported in a study conducted inNorthen Ghana by Feyisetan *et al.* (2003) whereby, respondents who reported that their network partners approve and encouraged contraception use were also more likely to use contraception themselves. These findings concur with those reported by Avogo and Agadijanan (2008) in a study conducted in Ghana that

men's exposure to reproductive and contraceptive discussions within their social networks exerts a significant effect on their contraceptive use as well.

The results for men showed that most respondents discussed with their network members on all categories notably about injectables, pills, implants as well as condoms and female sterilization (Table 5.9).

Table 5.9: Contraceptive Methods Discussed by Men and their Social Network (%)

Contraceptive method Discussed	1st person		2nd person		3rd person		4th person	
	Kishapu	Mvomero	Kishapu	Mvomero	Kishapu	Mvomero	Kishapu	Mvomero
F/sterilization	26.8	06.4	19.2	3.6	16.7	-	4.0	-
Male sterilization	04.9	04.3	-	3.6	5.6	-	-	-
IUD	04.9	-	03.8	-	-	-	-	-
Injectables	07.3	36.2	11.5	32.1	11.1	57.1	1.3	3.0
Implants	12.2	04.3	19.2	14.3	11.1	7.1	4.0	-
Pills	12.2	27.7	7.7	21.4	22.2	28.6	-	0.6
Condom	19.5	06.4	30.8	10.7	22.2	-	4.0	0.6
Diaphragm	02.4	-	-	-	5.6	-	1.3	-
Rhythm	04.9	06.4	3.8	3.6	-	-	-	-
Withdrawal	-	08.5	-	10.7	-	7.1	85.3	95.7
Traditional methods	04.9	-	3.8	.-	-	-	-	-
N	**41**	**47**	**26**	**28**	**18**	**14**	**26**	**28**

Avogo and Agadijanan (2008) reported that men tend to report positive assessment of family planning and encouragement to use modern contraception among social network members, and these exchanges appear to have a strong impact on men's views of contraception because of pressure for conformity that they generate. According to Berhaman*et al.* (2002), in a study conducted in Kenya, they found out

that there was a great deal of uncertainty and informa discussions outside the clinics about the effects of these methods on women's bodies. Such discussions are criticized by Kenyan family planning professionals as circulating myths and rumours that inhibit the adoption of modern methods, but they may circulate information about the actual experiences of others, both, satisfactory and unsatisfactory, and permit the participants to assess the extent of contraceptive use, as well as its acceptability among those with whom they talk.

The theory of social network recognizes that as individuals interact, they learn and get information from each other. It is, therefore, expected that discussions on family planning matters among social network members can have significant influence on individuals' attitude towards family planning and, it is easier for non-user of contraceptives to be influenced by users (Lindsay, 2011).

5.5 Network Structure and Modes of Action

For a discussion to take place, someone must initiate it. Respondents were asked to give information on who initiated their discussions. For all four network members, the majority of women and men respondents from Mvomero district were reported to initiate the discussions - but for Kishapu district, the majority reported the social network members to have been the initiators. Additionally, most of first social network members among women reported to be using injectables, implants, pills and female sterilization (Table 5.10).

These results showed that there was a highly significant association statistically ($p=.011$), between the person who initiated discussion about family planning,

(between respondent and the social network member) and the current use of contraceptives but not with the intention to use contraceptives in the future and family size (Table 5.10).

Table 5.10: Initiator of Discussion on Contraceptive use Within Social Network (%)

Initiator of discussion	Women							
	1st person		2nd person		3rd person		4th person	
	Kishapu	Mvomero	Kishapu	Mvomero	Kishapu	Mvomero	Kishapu	Mvomero
Other person	66.7	34.3	56.9	25.0	78.6	31.8	65.7	25.0
Respondent	33.3	65.7	43.1	75.0	21.4	68.2	34.3	75.0
N	**78**	**67**	**51**	**40**	**42**	**22**	**35**	**12**
Initiator of discussion	**Men**							
	Kishapu	**Mvomero**	**Kishapu**	**Mvomero**	**Kishapu**	**Mvomero**	**Kishapu**	**Mvomero**
Other person	48.7	27.1	27.6	32.4	22.2	28.6	18.2	14.3
Respondent	51.3	68.8	62.4	67.6	77.8	71.4	81.8	85.7
N	**39**	**48**	**26**	**34**	**18**	**14**	**11**	**07**
Chi-square for current contraceptive use =9.108[a] significant at p<.01								

The results further indicated that many more contraceptive methods were discussed and were reported to be used. This implies that social network members have influence on contraceptive use regardless of whether the respondent is the initiator of the discussion or not and this was true for respondents from both Kishapu and Mvomero districts (Table 5.11).

Among male social network members, the most used contraceptive methods (themselves and their spouses) were condom, pills, injectables, female sterilization, rhythm and traditional methods. However, there were notable differences between

districts in that male network members from Kishapu districts reported to be using mostly condoms, female sterilization and traditional methods.

Table 5.11: Female Responses on the Type of Contraceptive used by Social Network Members (%)

Contraceptive method	1st person		2nd person		3rd person		4th person	
	Kishapu	Mvomero	Kishapu	Mvomero	Kishapu	Mvomero	Kishapu	Mvomero
F/sterilization	18.5	03.1	14.3	-	05.1	-	05.9	-
M/sterilization	04.6	-	02.4	05.0	07.7	-	02.9	-
IUD	03.1	-	04.8	02.5	02.6	-	05.9	-
Injectables	21.5	63.1	28.6	55.0	30.8	54.5	20.6	66.7
Implants	24.6	04.6	28.6	02.5	28.2	09.1	20.6	08.3
Pills	13.8	21.5	14.3	32.5	15.4	31.8	29.4	08.3
Condom	04.6	01.5	-	-	02.6	-	05.9	16.7
Diaphragm	03.1	03.1	-	-	-	04.5	-	-
Rhythm	04.6	03.1	07.1	02.5	05.1	-	05.9	-
Withdrawal	01.5	-	-	-	02.6	-	02.9	-
Traditional	-	-	-	-	-	-	-	-
N	**65**	**65**	**42**	**40**	**39**	**22**	**34**	**12**

While, members from Mvomero district were using mostly, pills, injectables and rhythm method. There was no single social network member from Mvomero district who reported to be using traditional method (Table 5.12). In this regard, the results showed association between the specific methods of contraception used by the respondents and those used by network partners, suggesting that members of social networks exchange and evaluate specific contraceptive methods before adopting.

These findings are similar to those reported by Valente *et al*., (1997) and Samandari *et al.*,(2010) which suggest that social support of husbands, peers and elders who reported that their network partners approve contraceptive use, and encourage the respondents to use were more likely to use contraceptives themselves, as the association encouragement and actual use was particularly strong.

Table 5.12: Male Responses on the Type of Contraceptive used by Network Members (%)

Contraceptive method	1st person		2nd person		3rd person		4th person	
	Kishapu	Mvomero	Kishapu	Mvomero	Kishapu	Mvomero	Kishapu	Mvomero
F/sterilization	10.7	04.5	21.1	-	08.3	07.1	33.3	14.3
M/sterilization	07.1	02.3	-	03.6	-	-	-	-
IUD	-	02.3	-	03.6	-	-	-	-
Injectables	-	29.5	05.3	32.1	-	57.1	-	57.1
Implants	03.6	04.5	05.3	07.1	-	07.1	-	-
Pills	07.1	22.7	15.8	21.4	16.7	14.3	-	-
Condom	32.1	13.6	42.1	14.3	41.7	07.1	50.0	14.3
Diaphragm	03.6	-	-	-	08.3	-	16.7	-
Rhythm	28.6	11.4	-	07.1	08.3	-	-	14.3
Withdrawal	-	09.1	-	10.7	-	07.1	-	-
Traditional	07.1	-	10.5	-	16.7	-	-	-
N	**28**	**44**	**19**	**28**	**12**	**14**	**06**	**07**

It was also interesting to know how respondents got to know the type(s) of contraceptives their social network members use. Most network members in all categories shared with respondents the specific contraceptives they use without being asked by respondents (Table 5.13).

Table 5.13: Social Network Members' Disclosure on Contraceptive Methods (%)

How respondent knew	Women							
	1st person		2nd person		3rd person		4th person	
	Kishapu	Mvomero	Kishapu	Mvomero	Kishapu	Mvomero	Kishapu	Mvomero
He /She told me	97.0	87.7	95.2	92.5	94.9	91.3	94.1	100.0
I asked him /her	03.0	12.3	04.8	07.5	05.1	08.7	05.9	-
N	**67**	**65**	**42**	**40**	**39**	**23**	**34)**	**100**
How respondent knew	**Men**							
	Kishapu	**Mvomero**	**Kishapu**	**Mvomero**	**Kishapu**	**Mvomero**	**Kishapu**	**Mvomero**
He /She told me	88.5	90.5	88.9	92.3	91.7	100.0	100.0	100.0
I asked him /her	11.5	9.5	11.1	7.7	8.3	-	-	-
N	**26**	**42**	**18**	**26**	**12**	**13**	**6**	**6**

Chi-square for current contraceptive use=11.827[a] significant at p<.05

In this aspect, there was small difference between respondents from Kishapu and those from Mvomero districts. This connotes that the consulted people were trusted by respondents to the extent of sharing such personal information voluntarily. The same pattern was observed among men from Kishapu and Mvomero district.

Results revealed that, statistically there was a significant association (p=.037) between the way respondent knew that the social network is using family planning methods and family size (Table 5.13). However, there was no statistical association between the way respondent knew that the social network is using family planning methods and contraceptive use.

It was noted from the results that, when data were disaggregated by family size, most men and women from Kishapu and Mvomero districts who received encouragement to use contraceptives from their social network members had up to six children, with the majority of them being within the three to four children category. This pattern was uniform across all social network members (Table 5.14).

These findings connote that, encouragement to use contraceptives from social network members has had a positive impact in the actual use of contraceptives, culminating into modestly small family size for those who started using contraceptives before having large family size though the association between social network encouragements to use contraceptive and family size was not statistically significant.

Table 5 14: Percentage Distribution of Social Network Encouragement to use Contraceptives and Family Size (%)

Number of children	Women				Men			
	1st person	2nd person	3rd person	4th person	1st person	2nd person	3rd person	4th person
1-2	31	32.2	31.3	23.9	32.1	38.9	40.0	35.3
3-4	38	43.3	42.2	50.0	35.7	35.2	33.3	35.3
5-6	20.4	17.8	17.2	15.2	22.6	16.7	16.7	17.6
7-8	7	3.3	4.7	6.5	3.6	3.7	3.3	5.9
9-10	3.5	3.3	4.7	4.3	3.6	1.9	3.3	5.9
>10	-	-	-	-	2.4	3.7	3.3	-
N	**142**	**90**	**64**	**46**	**84**	**54**	**30**	**17**

5.6 Logistic Regression Results for Social Networks

5.6.1 Logistic Regression Results (Women)

A logistic regression analysis was conducted to predict the intention to use contraceptives in the future by using social network members whose opinion matters besides that of their husbands as predictor. A test of the full model against a constant only model was statistically significant, indicating that the predictors as a set reliably distinguished between respondents who intend to use contraceptives in the future and those who do not (Chi-square=9.766, p=.045 with df=4). Nagelkerke's R^2 of .095 indicated a weak relationship between prediction and grouping. Prediction success overall was 78.8%. The Wald criterion demonstrated that only the first social network member who opinion matters other than husband made a significant contribution to prediction (p=.024). The regression coefficient value was positive, with the odds ratio that first social network member is 2.663 times more likely to

influence the intention of respondent to use contraceptives in the future, therefore rejecting the null hypothesis (Appendix VIIa-1).

Respondents' discussion with social network members was another variable included in the analysis. The association between respondent discussion about family planning with social network members and intention to use contraceptives in the future revealed negative relationship for women with odd ratio .222 times less likely to intend to use contraceptive use after discussion with the first network member as compared with the rest. The level of significance between respondent discussion about family planning with first social network member and intention to use contraceptives in the future was statistically significant with p=.007, therefore rejecting the null hypothesis (Appendix VIIa-2).

Regarding the kind of encouragement respondents received from social network member, it showed positive regression coefficient with intention to use contraceptives in the future for women with odd ratio 3.615times more likely for respondents to intend to use contraceptives in the future based on the encouragement she receive from the first social network member. The level of significance between encouragement from the first social network member and intention to use contraceptives in the future was statistically significant with p=.008, therefore rejecting null hypothesis (Appendix VIIa-3).

Whether social network members encouraged or discouraged respondents on the use of contraceptives was another variable included in the analysis and it demonstrated

positive relationship with intention to use contraceptives in the future for women with odd ratio 3.615 times more likely for respondents to intend to use contraceptives in the future based on the encouragement she receive from the first social network member. The level of significance between the encouragement respondent receive from the first social network member and intention to use contraceptives in the future was statistically significant with p=.008, therefore rejecting the null hypothesis (Appendix Va-4).

As far as the association between the contraceptive method used by respondents social network members and intention to use contraceptives in the future had negative regression coefficient with odds ratio of 0.315 times less likely for respondent to intend to use contraceptives in the future based on the method used by the fourth social network member. The observed level of significance between the contraceptive method used by the fourth social network member and intention to use contraceptives in the future was statistically significant with p=.050 (Appendix VIIa-4), but the relationship with current contraceptive use was positive with value indicating that family planning method used by the fourth network member is 1.611 more likely to influence respondent contraceptive use, therefore rejecting the null hypothesis (Appendix VIIa-5).

5.6.2 Logistic Regression Results (Men)

This section present logistic regression analysis results for men's social network and its association with current contraceptive use and family size as indicated in Appendix Vb.

The obtained results demonstrated that the association between whether social network members encouraged or discouraged respondents from using contraceptives and current contraceptive use had weak relationship (Nagelkerke's R^2 of .090) but with positive regression coefficient with odd ratio 3.452 times more likely for respondents to use contraceptives depending on the encouragement he received from the first social network member than others. Level of significance between first social network member encouragement to use contraceptive and current contraceptive use was statistically significant with p=.012, therefore rejecting the null hypothesis (Appendix VIIb-1).

Specific contraceptive method discussed by respondent and social network members was another variable which was analyzed as a predictor on family size. It was vivid from the results that the association had moderate relationship (Nagelkerke's R^2 of .498) with positive regression coefficient with odd ratio 4.057 times more likely for respondents to have small family size based on the specific contraceptive method discussed with the first social network member than others. The level of significance observed was p=.024, therefore rejecting the null hypothesis (Appendix VIIb-2).

5.7 Chapter Summary

The results of this analysis illustrate the importance of couple's interactions with social networks on family planning issues. Most couples had at least one person other than their spouses whom they seek opinion, and this is more so for women than men. Women respondents tend to seek opinion more from females and men respondents from males, though few opposite sex network members were mentioned

as well. Close relatives were reported by the majority of women (mothers, farthers, brothers, sisters, sons and daughters) and unlike women, men seemed to seek opinion more to their friends.

It was noted that women tend to discuss issues related to family planning more than men, but more so in Kishapu district than Mvomero district for both spouses. It was further observed that, couples discuss more on contraceptive use with their friends and close relatives and during these discussions respondents received both encouragement and discouragement from their network members but the level of encouragement to use contraceptives by network members was very high to all. Most discussed contraceptives were injectables, pills and implants.

Generally, withdrawal and traditional methods were not discussed by women respondents at all. Most couples from Mvomero were initiators of these discussions while for those from Kishapu, their network members were the ones who initiated the discussions. Injectables, pills, implants and female sterilization were the most used family planning methods by network members for women, and for men were condom, pills, enjactables and female sterilization. Most network members shared with respondents on the family planning methods they are using without being asked indicating how trusts worthy these respondents are.

It was observed that women and men who were encouraged to use family planning from their network members had a modest family size of up to four children, indicating that encouragement from network members had positive impact in the

actual use of family planning and hence family size. Statistically, social network had more impact to women intention to use contraceptives in the future but for men was on current contraceptive use.

CHAPTER SIX

THE INFLUENCE OF COMMUNICATION AMONG COUPLES ON FERTILITY PREFERENCE

6.1 Chapter Overview

This chapter presents the attitude of couples towards spousal communication on reproductive matters and family planning. The level of attitude towards spousal communication in relation to contraceptive use and family size will be presented as well. Frequency of couple's communication on family planning as well as its association with contraceptive use and family size will also be presented.

6.2 Inter Partner Communication on Reproductive Matters

Although discussion between couples about contraceptive use is not a precondition for adoption of contraceptives, its absence may be an impediment to using them. Attitude of women respondents from both Kishapu and Mvomero districts was very positive as they supported all the positive statements and they were negative in all negative statements which did not support couples' communication on reproductive matters (Table 6.1.) There were no distinct difference between responses within sex in the two districts, hence the results were combined. However, it is noted that very few respondents were not sure whether to agree or disagree. Like women, men also had positive attitude towards couple's communication. The major difference observed between men and women was that in most statements, men were unsure about whether or not to agree or disagree, though the proportions showing uncertainties were equally low among men.

Table 6.1: Respondents Attitude towards Couple's Communication on Reproductive Matters (%)

Attitudinal Statements (N=293)	Agree (Men)	Agree (Women)	Uncertain (Men)	Uncertain (Women)	Disagree (Men)	Disagree (Women)
Husband and wife should discuss about the number of children they should have	95.6	94.9	0.3	0.7	4.1	4.4
Husband and wife should make joint decisions about contraceptive use	95.9	94.8	1.4	0.3	2.7	4.8
Husband and wife communication should exclude family planning	6.2	6.5	3.4	0.7	90.4	92.8
Planning for the family is the responsibility of the husband	8.5	12.3	3.1	0.3	89.4	87.3
It is important for the spouses to communicate with each other on matters of family planning	95.5	96.3	0.7	0.3	3.4	3.7
Communication between husband and wife on postponing childbearing is not beneficial to the family	14.0	14	9.2	1.4	78.8	84.6
Men should be less involved in discussing about family planning with their wives	6.1	5.4	2.7	0.0	91.1	94.6
Husband and wife should discuss together if they want to delay child bearing	93.1	95.2	1.0	0.0	5.8	4.8
Communication between husband and wife about family planning should be encouraged	93.9	95.6	1.4	0.0	4.8	4.4
Husband and wife should never communicate about issues related to family planning	9.9	12.6	1.0	0.7	89.1	86.7

These results, however, do not imply directly that such attitude will lead to adoption of family planning. Interspousal communication is an important intermediate step along the path to eventual adoption and especially continuation of contraceptive use.

Lack of discussion may reflect a lack of personal interest, hostility to the subject, or customary resistance in talking about sex-related matters (TDHS, 2010).

Normally marital fertility involves participation of the wife and husband who may differ in their reproductive goals (in terms of number and sex composition of children, timing of having the children). The pattern and processes of a couple's communication can therefore, undoubtedly have majorconsequences for number of children, timing of birth and contraceptive adoption. Successful planning and decision making about fertility size and use of contraceptives require effective communication of both marital partners (Feyisetan, 2000; Oyediran, 2002; Ayokunle, 2011).

The findings from the current study are congruent with earlier studies that found inter-spousal communication as the first step in rational process of fertility decision and a precursor of lower desired family size (Becker, 1996; Mason *et al*., 1987; Mai, 1996; Reza, 2001; Mtae, 2012). An assumption is that communication lead to family planning, but the reverse could also be true (Sharan, 2002). Men and women in unions can negotiate about reproductive health matters but their behaviour is strongly influenced by the norms of the society as well. Norms that subordinate women's role in decision making often discourage women from acting to promote their own health needs (Rakhshan, *et al*., 2008).

Index of attitude towards couple's communication on reproductive matters was prepared and it ranged from 10 to 30. It was further categorized into Negative,

Neutral and Positive whereby the score of 10 to 19 were considered as negative, 20 neutral and 21-30 were considered positive. Scores among males and females in both districts exceeded 96 percent indicating that respondents are highly supportive of communication between couples on reproductive matters (Table 6.2).

Table 6.2: Level of Attitude Towards Couples Communication on Reproductive Matters (%)

Women				Men			
Scores	**General**	**Kishapu**	**Mvomero**	**Scores**	**General**	**Kishapu**	**Mvomero**
10.00	0.3	0.8	-	13.00	0.3	-	0.6
12.00	1.0	0.8	-	18.00	0.3	-	0.6
14.00	0.3	0.8	-	19.00	0.3	0.8	-
16.00	0.3	0.8	-	20.00	2.4	3.9	1.2
20.00	0.3	-	0.6	21.00	.3	-	0.6
22.00	1.0	0.8	1.2	22.00	1.4	0.8	1.8
24.00	4.1	5.4	3.0	23.00	1.0	1.6	0.6
25.00	0.3	-	0.6	24.00	2.0	3.9	0.6
26.00	4.8	5.4	4.3	25.00	1.4	0.8	1.8
27.00	0.3	-	0.6	26.00	6.1	10.1	3.0
28.00	24.6	33.3	17.7	27.00	2.4	2.3	2.4
29.00	2.7	.8	4.3	28.00	17.7	25.6	11.6
30.00	59.7	51.2	66.5	29.00	5.5	.8	9.1
-	-	-	-	30.00	58.7	49.6	65.9
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**
Level of communication							
Negative	02.0	03.1	01.2	Negative	00.7	00.0	01.2
Neutral	00.3	00.0	00.6	Neutral	01.7	03.1	00.6
Positive	97.6	96.9	98.2	Positive	97.6	96.9	98.2
N	**293**	**129**	**164**		**293**	**129**	**164**

There was little variation between couples and between districts on general attitude towards communication. These observations show that couples in the study areas were ready and willing to communicate with their spouses on reproductive matters.

6.3 Attitudes towards Couple's Communication and Contraceptive Use

Attitudes towards communication were further related to contraceptive use in order to get more information. Respondents who had positive attitudes towards communication, 59.4 percent of women and 87.8 percent of men were currently using contraceptives. Surprisingly, there was 33.3 percent of women and 60.2 percent of men who had negative attitude towards communication but, they were currently using contraceptives as shown in Table 6.3.

Table 6.3: Respondents Attitude towards Couples Communication and Contraceptive Use (%)

Level	Current contraceptive use					
	Women			Men		
	Total	**Kishapu**	**Mvomero**	**Total**	**Kishapu**	**Mvomero**
Negative	33.3	50.0	50.0	41.3	-	50.0
Neutral	100	-	100.0	65.9	50.0	100.0
Positive	59.4	48.0	49.7	87.8	58.4	58.4
ALL(N)	**59.0(173)**	**48.1(62)**	**50.0(82)**	**65.5(192)**	**58.1(75)**	**58.5(96)**
Level	**Intention to use contraceptives in future**					
	Total	**Kishapu**	**Mvomero**	**Total**	**Kishapu**	**Mvomero**
Negative	60.0	66.7	50.0	54.5	-	50.0
Neutral	100.0	-	100.0	85.4	50.0	100.0
Positive	78.3	67.2	70.2	96.9	72.0	70.2
ALL(N)	**78.1(221)**	**67.2(80)**	**70.1(108)**	**77.8(228)**	**71.3(92)**	**70.1(115)**

This means, having positive attitude alone is not enough to conclude that an individual is using contraceptives - as it is not easy to know whether actual communication is taking or not taking place. Moreover, having negative attitude

towards communication is not enough to conclude that an individual will not use contraceptives.

For those who seem to have negative attitude towards communication and yet were using contraceptives covertly, may imply poor spousal support, hence poor communication. Do and Kurimoto (2012), found that difficulties in spousal communication have been associated with covert contraceptive use among women. They also found out that husband's disapproval to use contraceptives was a common reason for married women in Ghana not to use contraceptives for fear that they would lose their husbands affection.

In Uganda, men's disapproval of family planning was cited as a reason for not using contraceptives by some women (Khan *et al*., 2008). Whilst in Namibia, a multi country study found out that approval of family planning by both spouses was significantly associated with women's use of any modern method (Gebreselassie, 2007).

It was observed during focus group discussions that spouse communication in the study area do exist in small extent as reported by this respondent from Mvomero:

> *"Many women use contraceptives covertly because their husbands object the use of contraceptives and most of the time they are not ready to discuss such issue when they are drunk. Men being decision makers in household matters a woman cannot argue with him. However, the situation has improved since we do receive advices from Hospital or health centers…. (Mvomero women aged 32yrs). "*

Intention to use contraceptives in the future was found to be high among women and men respondents from Mvomero and Kishapu districts with positive attitude towards couple's communication on contraceptive use as well. Couples who view family planning favorably, tend to communicate about the number and spacing of their children, and tend to adopt contraceptive methods. For these individuals, communication campaigns were found useful in that they provide information that could promote further informed discussion like information on family planning services, such as availability, costs or information about particular methods (Sharan and Valente, 2002).

However, in a study conducted in Ghana, participants demonstrated a remarkable willingness to use a family planning method in the future, but in reality, not all positive intentions can be translated into the action. But still, it can help to suggest how to plan for future demands for contraceptives and to provide a distribution system to facilitate access to services and supplies (Akafuah, 2008).

6.4 Couples Communication on Family Planning

Communication on family planning does exist in the study area, though a discrepancy was noted in reporting when couples were asked whether they discussed about family planning in the past year with more women from Kishapu and more men from Mvomero reporting that they did. However, the number of women respondents who discussed about using a particular method was higher for Mvomero as compared to Kishapu. Results showed that men discussed more on the use of particular method than women, and more for Mvomero as compared to Kishapu (Table 6.4). The gap was much bigger when asked whether they discussed about

using a particular method as very few women as compared to men reported to do so though inconsistency was noted in reporting between men and women with more men reporting to discuss on the number of children couple should have than women (Table 6.4).

Table 6.4: Respondents Responses on Couples Communication (%)

Responses	Women			Men		
	Total	**Kishapu**	**Mvomero**	**Total**	**Kishapu**	**Mvomero**
Discussed bout family planning in the past year						
Yes	54.6	48.1	59.8	56.0	45.7	64.6
No	45.4	51.9	40.2	44.0	54.3	35.4
N	**293**	**129**	**164**	**182**	**69**	**113**
Chi-square for women current contraceptive use=8.938[a] significant at p<.05 Chi-square for women intention to use contraceptives in the future= 0.803[a] significant at p<.05 Chi-square for men current contraceptive use=51.343[a] significant at p<.05 Chi-square for men intention to use contraceptives in the future=52.711[a] significant at p<.05						
Discussed about using a particular method to avoid a pregnancy in the past month						
Yes	23.5	18.6	27.4	55.3	42.6	65.9
No	76.5	81.4	72.6	44.7	57.4	34.1
N	**293**	**129**	**164**	**182**	**69**	**113**
Chi-square for women current contraceptive use=32.176[a]significant at p<.05 Chi-square for women intention to use contraceptives in the future= 18.543[a] significant at p<.05 Chi-square for men current contraceptive use=75.793[a] significant at p<.05 Chi-square for men intention to use contraceptives in the future=61.021[a] significant at p<.05 Chi-square for men family size=14.740[a] significant at p<.05						
Couples discussed about the number of children they should have						
Yes	55.6	50.4	59.8	64.2	52.7	73.2
No	44.4	49.6	40.2	35.8	47.3	26.8
N	**293**	**129**	**164**	**293**	**129**	**164**
Chi-square for women current contraceptive use=16.057[a] significant at p<.05 Chi-square for women intention to use contraceptives in the future= 15.924a significant at p<.05 Chi-square for men current contraceptive use=31.244a significant at p<.05 Chi-square for men intention to use contraceptives in the future=33.789a significant at p<.05 Chi-square for men family size=16.284a significant at p<.05						

This means that some men respondents did report to have been discussing with their spouses on family planning but, in actual sense they did not or the vice versa. Spouse do communicate about family planning in the area, but these discussions are not very common and most of the time men seem not to be ready to engage themselves to such discussions, as observed during focus group discussion:

> *"Most men do not prefer discussing about family planning as they want their wives to continue to have children at least not less than six children (Mvomero woman aged 41years."*

It was observed that spouse communication occurs mostly to spouses who are educated as reported by men respondent from Kishapu;

> *"It does happen sometimes (discussion on family planning) but mostly is for those who are more educated. For those who are not educated they don't communicate and they keep reproducing until all their eggs are finished (It is a Sukuma tradition)".*

It was reported that men fear that their spouses will have extra marital affairs if they will use contraceptives as commented by one respondent from Mvomero;

> *"It is not very common for couples to discuss about family planning as men avoid such discussion though women think it is important to do so. Men do not want to discuss about the use of contraceptives because they are worried that their wives will have sexual relationship with other men, which is not true (Mvomero woman aged 36years)."*

In a study conducted in Uganda by Rakhshani *et al*., (2005) on married men and women involved in sexual relationships, it was revealed that women may negotiate

about family planning matters - however, their behaviour were strongly influenced by the norms of society and women often accused their husbands of not being supportive of their family planning need. Winkvist, (2000) and Ndinda et al.(2011) also emphasized that in traditional cultures, married women do not feel free to talk about contraceptive methods with their husbands, as in many communities discussions about sexual matters are a taboo for men as well as for women and couples may be afraid to raise the topic of contraception.

Informal interspousal communication about sexuality and reproduction tend to be shaped by taboos that constrain the discussion in accordance with the social identity of individuals (Bennet, 2005). However, it has been reported by Hamid *et al*., (2011) that inter-spousal communication has been recognized as a key factor for adoption and for sustained use of family planning, because it allows couples to discuss what might appear unclear and exchange information that may change strongly held beliefs (Bawah, 2002; Feyisetan, 2000 and Klomegah, 2006*)*.

Results for women indicated that – statistically, there was a high significant association between respondents discussion on FP in the past year and current contraceptive use (p=.003) as well as intention to use contraceptives in the future (p=.000) but not for family size. On the other hand, men results showed a strongly statistical association as well between respondents discussion on FP in the past year and current contraceptive use (p=.000), intention to use contraceptives in the future (p=.000) but not for family size as displayed in Table 6.4.It was further revealed that, discussion on the use of particular method in the past month was statistically

significant to current contraceptive use and intention to use contraceptives in the future (p=.000) respectively.

Furthermore, association between discussion about the number of children respondent should have and contraceptive use (current use and intention to use), was highly significant (p=.000) for women. The same was observed for men with the addition of family size which was also statistically significant (p=.012) as indicated in Table 6.4.

The number of times couples discussed about family planning in the past year was also investigated. The results showed that most of the respondents from both districts did discuss about family planning more than once, with the majority reporting to discuss twice, except men from Mvomero who reported to discuss thrice as shown in Table 6.5.

Table 6.5: Frequency of Couple's Discussion on FP in the Past Year (%)

Frequency	Women			Men		
	Total	**Kishapu**	**Mvomero**	**Total**	**Kishapu**	**Mvomero**
1.00	11.1	14.3	09.1	22.0	23.2	21.2
2.00	32.7	41.3	27.3	35.7	52.2	25.7
3.00	25.3	22.2	27.3	30.2	20.3	36.3
More than 3 times	30.9	22.2	36.4	12.1	04.3	16.8
N	**162**	**63**	**99**	**182**	**69**	**113**

F-test for women current contraceptive use=9.156significant at p<.05
F-test for women intention to use contraceptives in the future =20.890significant at p<.05
F-test for men current contraceptive use=34.734significant at p<.05
F-test for men intention to use contraceptives in the future =34.926significant at p<.05
F-test for men family size=13.482significant at p<.05

These findings were statistically significant at 0.05 signifying that there is a link between couple's discussion on family planning in the past year and family size especially for females but not for males. There was also discrepancy on reporting between men and women, showing that men were more inclined tohave discussed this issue.

Apart from having this discrepancy, it is clear that couples from Mvomero discussed more on family planning than Kishapu couples, which is reflected in their relatively higher contraceptive use. Spousal discussion about family planning opens the door for couples to talk about the number of children to have and the importance of using contraceptives (DeRose*et al*. 2004; Sharan and Valente, 2002). This is particularly challenging in countries where overt spousal discussion of sexual matters is discouraged and husband's opposition is the major obstacle to contraceptive practice (Beekle and McCabe, 2006). The result obtained from a study conducted in Ghana by Akanbi *et al*., (2011) revealed that there is a positive and strong relationship between interspousal communication and contraceptive use.

It was observed during focus group discussions that women fear to introduce such discussions due to cultural norms which forbid such discussions but also fear to use contraceptives covertly as commented by this respondent from Kishapu:

> "*Normally women fear to use family planning methods without their husband approval as, once a husband see that his wife is not getting pregnant she can marry another wife, as a result many women give birth to many children in order to prevent their husbands from marring other women*

(Kishapu woman aged 48years)"

The association between number of times respondents discussed about FP in the past year and contraceptive use was statistically significant (p= .003 and p=.000) but not for family size. However, results for men were statistically significant (p=.000) for current contraceptive use, intention to use contraceptives in the future and family size as shown in Table 6.5.

Further analysis on the number of times respondents reported to have discussed in the previous month showed a big discrepancy in reporting with the majority of women from Kishapu (40.7%) and Mvomero (46.8%) districts reporting to have discussed only once, while most men from Kishapu (66.2%) and Mvomero (65.8%) reported to discuss twice as shown in Table 6.6.

Table 6.6: Frequency of Couple's Discussion about FP in the Past Month (%)

Frequency	Women			Men		
	Total	**Kishapu**	**Mvomero**	**Total**	**Kishapu**	**Mvomero**
1.00	44.6	40.7	46.8	27.8	23.1	30.6
2.00	28.4	25.9	29.8	65.9	66.2	65.8
3.00	16.2	18.5	14.9	03.4	09.2	00.0
More than 3 times	10.8	18.5	14.9	02.8	01.5	03.6
N	**162**	**63**	**99**	**182**	**69**	**113**

F-test for women current contraceptive use=35.898significant at p<.05
F-test for women intention to use contraceptives in the future =18.050significant at p<.05
F-test for men current contraceptive use=4.099significant at p<.05
F-test for men intention to use contraceptives in the future =5.141significant at p<.05

This discrepancy is due to under-reporting or over reporting which is due to not being able to remember exactly when the discussion took place; but also it could be due to the fact that some respondents reported that they communicated while they did

not, trying to show that they are supportive of couple's communication.

From these results, it is vividly clear that interspousal communication was occasionally taking place in the study areas, but, as the number of respondents reported to discuss in the previous month were way below the number of respondents reported to discuss in the past year. However, several studies have reported a positive association between the frequencies of communication between partners with contraceptive use (Sharan and Valente, 2002; Kulczycki, 2008; Fikree *et al*, 2001).

Research over more than 40 years consistently demonstrates that men and women who discuss on family planning are more likely to use contraceptives, to use them more effectively, and to have fewer children (Rakhshani*et al.*, 2005). In contrast, when men and women do not know their partners' fertility desires and attitudes toward family planning or contraceptive preferences, there may be unintended pregnancies, leading perhaps to go for unsafe induced abortions and a risk of transmission of sexually transmitted diseases. Men's involvement could assume an essentially prominent role in an individual couple's family planning efforts.

A study conducted by Duze and Mohammed (2006) in the Hausa patrilineal society in northen Nigeria, showed that males have strong influence on many household decisions including those involving reproduction. As such, men are favoured by significant roles they play as household's heads, custodians of their lineage and providers for their families.

It was reported during focus group discussions that it is important for spouses to discuss on family planning as life now days is tough having many children as reported by this respondent from Mvomero;

> *"It is important for husband and wife to communicate on matters regarding family planning as life now days are very tough, and you will have to make sure your children go to school (Mvomero woman aged 32years)."*

But this is difficult as most of the times men are not ready to do so as commented by this respondent from Mvomero:

> *"Men do not want to discuss about the use of contraceptives because they are worried that their wives will have sexual relationship with other men, which is not true (Mvomero woman aged 35years)."*

This was supported by another respondent from Mvomero who commented that;

> *"It is not very common for couples to discuss about family planning as men usually do not like to discuss, and they do not want their wives to use contraceptives, though women think it is important to do so (Mvomero woman aged 28years)"*.

Statistically, F-test results showed that there was a significant association between the number of times respondents discussed about family planning in the past month and current contraceptive use and intention to use contraceptives in the future for women (p=.000) as well as for men (p=.008 and p=.002) but not with family size as in Table 6.6. The most discussed family planning methods for women respondents from Kishapu district were injectables and implants and the least discussed methods

were pills, female condom and rhythm For women respondents from Mvomero districts, they discussed more on pills and injectables and least discussed methods were implants and female sterilization (Table 6.7).

Table 6.7: Contraceptive Methods Discussed in the Past Year (%)

Methods	Women			Men		
	Total	**Kishapu**	**Mvomero**	**Total**	**Kishapu**	**Mvomero**
Female sterilization	07.5	13.0	04.5	07.8	10.2	06.5
Male sterilization	-	-	-	02.4	01.7	02.8
Injectables	32.8	34.8	31.8	21.6	08.5	28.7
Implants	17.9	39.1	06.8	05.4	13.6	00.9
Pills	22.4	04.3	31.8	21.0	10.2	26.9
Female condom	07.5	04.3	09.1	00.6	01.7	-
Male condom	-	-	-	10.8	16.9	07.4
Rhythm	11.9	04.3	15.9	18.6	27.1	13.9
Withdrawal	-	-	-	09.0	05.1	11.1
Traditional methods	-	-	-	03.0	05.1	01.9
N	**67**	**23**	**44**	**167**	**59**	**108**

Chi-square for men current contraceptive use=31.260[a] significant at p<.05
Chi-square for men intention to use contraceptive =45.785[a] significant at p<.05

Men respondents from Kishapu district discussed mostly on rhythm, male condom and implants and the least discussed methods were male sterilization and female condom while for men respondents from Mvomero district, the most discussed methods were injectables and Pills while least discussed methods were implants and traditional methods. Generally, injectables and pills were most discussed family planning methods as they are the most used methods by women and they are the ones which are readily available.

Men tended to discus more on family planning methods used by women than those used by men as most men do not use contraceptives themselves they rely on their

wives to do so. This also featured during men group discussion as one respondent commented that:

> *"Men we do discuss about family planning, but we discuss mostly family planning methods used by women as women are the ones responsible to use contraceptives and not us men (Kishapu man aged 42years)"*

Furthermore, Chi-square results showed that statistically there was highly significant association between respondents discussion on using particular contraceptive in the past year for men and contraceptive use (p=.000), intention to use contraceptives in the future (p=.000) but not for family size as shown in Table 6.7.

6.4.1 Index of Couple's Communication on Family Planning

An index was prepared for the purpose of testing whether there is communication between husband and wife on family planning. Furthermore, the values of the index were categorized into low, medium and high. Scores of 0 to 1 were considered being low, 2 medium and 3 high as shown in Table 6.8.

The results of the study indicated that women respondents from Kishapu district with low level of communications were (55.8 percent of women and 53.5 percent of men) compared to Mvomero where 43.9 percent of women and 31.7 percent of men reported to have low levels of communication. The highest levels of communication were obtained in Mvomero with more men 52.4 percent and 17.7 percent of women (Table 6.8).

Table 6.8: Index of Communication on Family Planning (%)

Scores	Women			Men		
	Total	**Kishapu**	**Mvomero**	**Total**	**Kishapu**	**Mvomero**
.00	32.4	39.5	26.8	27.0	38.8	17.7
1.00	16.7	16.3	17.1	14.3	14.7	14.0
2.00	35.2	31.0	38.4	14.0	11.6	15.9
3.00	15.7	13.2	17.7	44.7	34.9	52.4
N	**293**	**129**	**164**	**293**	**129**	**164**
Levels of communications						
Low	49.1	55.8	43.9	41.3	53.5	31.7
Medium	35.2	31.0	38.4	14.0	11.6	15.9
High	15.7	13.2	17.7	44.7	34.9	52.4
N	**293**	**129**	**164**	**293**	**129**	**164**

This discrepancy in reporting indicate that either some respondents had forgotten whether they discussed or did not or deliberatelygave false information in order to provide a picture that communication was taking place while it actually didn't. It is expected that communication on family planning can lead to adoption of contraceptive use, and therefore this could be one of the reasons as to why there is big difference on contraceptive use between Kishapu and Mvomero districts.

Though the number of women in Mvomero who reported to have communicated was small (17.7%) yetit was high compared to 13.2 percent of women in Kishapu. A good percentage of women respondents were in the medium category (31.0 percent at Kishapu and 38.4 percent at Mvomero) as shown in Table 6.8. This means that some women were using contraceptives - not only because they had discussed about family planning with their spouses but because of other factors as well. The rate of using contraceptives was double among women who discussed family planning -

even once or twice, with their husbands as compared with those who never discussed (Kamal, 2011).

Lack of communication about family planning may be associated with misconceptions about the role of spouse's view on family planning, in which in turn may inhibit mutual decision making. Men and women who do not communicate with their spouse about family planning may not be aware that their spouse views contraceptive use positively. In settings where family planning use is a sensitive issue and overt spousal communication is uncommon, men and women perceive such exchanges differently, and their underlying motivations and these perceptions guide their negotiation strategies with their partner (Sharan and Valente, 2002).

Furthermore, couples who communicate may perceive their spouses to being more supportive, feel less fatalistic about childbearing and more in control of their reproductive decisions, and be less embarrassed about discussing these issues with their spouses than partners in couples who do not communicate. By encouraging couples to discuss family planning issues, these perceptions indirectly lead to family planning adoption as both wives' and husbands' perceptions of communication play a role in the adoption of contraception (Sharan and Valente, 2002 and Link, 2011). In Tanzania, spousal communication about family planning, which was stimulated by exposure to a radio soap opera, played an important role in contraceptive adoption. There was a strong positive relationship between listenership levels by district and the change in the percentage of men and women who were currently using any family planning method (Rogers *et al*, 1999 and Ryerson, 2003).

Generally, the majority of women (49.1%) were in the low category and 15.7 percent were in the high category. This was not the same to men as majority of men (44.7%) showed high levels of communications followed by (41.3%) who displayed low levels of communications. These results showed discrepancy on the level of communication indicating that there were respondents who reported to communicate but actually they don't or perhaps they did communicate but could not recall.

6.4.2 Level of Couples Communication on FP and Contraceptive Use

Further analysis was conducted to find out whether there was any association between level of communication and contraceptive use. It was found out that, the current use of contraceptives increased with the increase in the level of communication. Contraceptive use was high among respondents who reported to have medium to high levels of communication (100 to 59.4 percent for women) and for men was high among respondents with high to medium level of communication (87.8% and 65.9%) as shown in Table 6.9.

The pattern was the same as for the intention to use contraceptives in the future as women respondents who reported to have high levels of communications were the ones with medium to high intention of using contraceptives in the future (100% to 78.3%) and for men were (100% and 70.2) as shown in Table 6.9.

Table 6.9: Level of Communication and Contraceptive use (%)

Level	Current contraceptive use					
	Women			Men		
	Total	**Kishapu**	**Mvomero**	**Total**	**Kishapu**	**Mvomero**
Low	33.3	50.0	50.0	41.3	-	50.0
Medium	100.0	-	100.0	65.9	50.0	100.0
High	59.4	48.0	49.7	87.8	58.4	58.4
N	**59.0**	**48.1**	**50.0**	**65.5**	**58.1**	**58.1**
Level	**Intention to use contraceptives in the future**					
	Total	**Kishapu**	**Mvomero**	**Total**	**Kishapu**	**Mvomero**
Low	60.0	66.7	50.0	54.5	50.0	50.0
Medium	100.0	-	100.0	85.4	-	100.0
High	78.3	67.2	70.2	96.9	72.0	70.2
N	**78.1**	**67.2**	**70.1**	**77.8**	**71.3**	**82.9**

6.4.3 Level of Couples Communication on Family Planning and Family Size

Level of couple's communication was further related with family size, and it was found out that a good proportion of women respondents with low and medium level of communications had up to four children while the majority with low level of communications had more than five children. The results for men indicated that most respondents with up to four children were those with high level of communication as expected and those with more than five children were those with low level of communication (Table 6.10).

Table 6.10: Level of Couple's Communications and Family Size –All (%)

Level	**Women**					
	1-2	**3-4**	**5-6**	**7-8**	**9-10**	**>10**
Low	41.3	50.5	56.9	50	62.5	50
Medium	43.5	30.8	31.0	42.3	0.0	50
High	15.2	18.7	12.1	07.7	37.5	-
N	**92**	**107**	**58**	**26**	**08**	**02**
Level	**Men**					
	1-2	**3-4**	**5-6**	**7-8**	**9-10**	**>10**
Low	31.5	31.8	53.3	54.8	61.5	66.7
Medium	17.4	17.6	10.0	09.7	-	08.3
High	51.1	50.6	36.7	35.5	38.5	25.0
N	**92**	**85**	**60**	**31**	**13**	**12**

It was also reported by Link (2011) and Lwelamira *et al*., (2012), that couples' agreement, conjugal closeness or spousal communication is a strong predictor of intended fertility and that, communication is associated with the lower fertility preference of couples. Their findings were not different from that of Kamal (2012) who found out that the existence of inter-spousal communication has a definite declining effect on fertility preferences in Bangladesh as women who discussed family planning with their husband had a smaller mean ideal size of family as compared to those who did not talk.

The results for women respondents from Kishapu showed that most of respondents with low levels of communications were the majority in all categories indicating that their level of communication is not associated with their family size. For Mvomero there was no particular pattern which was observed though the majority were those

with low to medium level of communication (Table 6.11). Attitude towards large family size could explain this difference between Kishapu and Mvomero districts, indicating that actual communication can have impact in fertility size but that alone cannot bring clear impact without considering other factors as well.

Table 6.11: Level of Couples Communications and Family Size-Women (%)

Level	**Women-Kishapu**					
	1-2	**3-4**	**5-6**	**7-8**	**9-10**	**>10**
Low	46.7	52.6	68.6	52.9	57.1	50
Medium	40.0	31.6	22.9	41.2	-	50
High	13.3	15.8	8.6	5.9	42.9	-
N	**30**	**38**	**35**	**17**	**07**	**02**
Level	**Women-Mvomero**					
	1-2	**3-4**	**5-6**	**7-8**	**9-10**	**>10**
Low	40.0	40.0	35.0	75.0	42.9	100
Medium	40.0	40.0	47.5	15.0	42.9	-
High	20.0	20.0	17.5	10.0	14.3	-
N	**45**	**50**	**40**	**20**	**07**	**02**

The results for men respondents from Kishapu showed that the majority of respondents with low level of communication had large family sizes of more than five children except those with one to two children. The results for men respondents from Mvomero were not that different as most respondents with low level of communications were the majority in all categories regardless of family size (Table 6.12). These results indicate that level of communication towards family size has major impact in Kishapu district as compared to Mvomero district, meaning that though communication was taking place but there were other factors which are in control of family size (Table 6.12).

Table 6.12: Level of Couple's Communications on and Family Size-Men (%)

Level	**Men-Kishapu**					
	1-2	**3-4**	**5-6**	**7-8**	**9-10**	**>10**
Low	50.0	28.1	64.5	72.2	54.5	72.7
Medium	11.5	21.9	09.7	05.6	-	09.1
High	38.5	50.0	25.8	22.2	45.5	18.2
N	**26**	**32**	**31**	**18**	**11**	**11**
Level	**Men-Mvomero**					
	1-2	**3-4**	**5-6**	**7-8**	**9-10**	**>10**
Low	53.0	49.1	51.7	53.8	50.0	100
Medium	16.7	09.4	10.3	7.7	-	-
High	30.3	41.5	37.9	38.5	50.0	-
N	**37**	**42**	**41**	**21**	**12**	**11**

6.5 Chapter Summary

The findings indicate that most couples had positive attitude towards communication, which is a very important step towards actual communication and therefore adoption of contraceptives and eventually lowering fertility levels in the study areas. Most couples with positive attitudes towards inter-spouse communications were using contraceptives and more men as compared to women, though a good number of respondents with negative attitudes also were using contraceptives. Intention to use contraceptives was found to be high among respondents with high attitudes.

Inter-spousal communication was taking place in the study area but occasionally, with the majority reporting to discuss more than twice in the past year but the number dropped for those who discussed about family planning in the past month, most of them reporting to discuss once or twice, especially on pills and injectables.

Couples from Mvomero discussed about family planning in the past year more than couples from Kishapu district but very few female respondents discussed about using a particular method to avoid pregnancy as compared to men.

Most discussed methods for Kishapu were injectables and implants while for Mvomero were pills and injectables. Least discussed methods for Kishapu districts were pills, female condoms and rhythm while for Mvomero were implants and female sterilization. Male respondents from Kishapu district discussed more on rhythm, male condom and implants and in Mvomero district injectables and pills were discussed more. Least discussed methods were implants and traditional methods for Kishapu district and male sterilization and female condom for Mvomero district. Conversely, more than fifty percent discussed about the number of children they should have.

Prepared Index indicated that nearly a half of respondent had low level of communication though majority had positive attitude towards communication. However, those with medium and high level of communication were the highest contraceptive users and they indicated highest intention to use contraceptives in the future. Most women with low level of communication were found to have larger family size and were the majority in all categories except those with one and two children, those with high levels of communications were also found to have large family size though were not the majority. Men with high levels of communications had also modest family size of up to four children while those with low level of communication had large family size of more than five children. Women respondents

from Kishapu district with medium to high level of communications had up to four children while for Mvomero district were those with up to six children. Frequency of communication was found to be important indicating the importance of communication towards adoption of contraceptives and therefore low family size which is not the case at the moment though it was not statistically significantly.

CHAPTER SEVEN

THE INFLUENCE OF COUPLE'S SOCIO-ECONOMIC STATUS ON FERTILITY PREFERENCE

7.1 Chapter Overview

This chapter discusses socio-economic status of couples by looking into couples decision making on various issues in the household, ownership of property (mainly houses and land) and attitude towards wife beating, followed by couples education level and employment status.The link of these variables and with contraceptive regulations and fertility preference willalso be portrayed.

7.2 Couples Decision Making on Various Issues in the Household

The status of decision making at the household level is central to family planning. This study was interested to know who makes decisions regarding various issues in the surveyed households.

7.2.1 Couples Decision Making on the Use of Earned Money by Respondent

The results showed that most couples make various decisions jointly. Looking into specific statements, most respondents reported to making decisions together regarding the use of the income they earn. Female respondents from Mvomero district were the majority (55.5%) reporting to make joint decisions while from Kishapu district the number of those who reported joint decision making and those who reported that their husbands are the ones who make decisions were nearly equal (33.3% and 34.1% respectively). Only 5.4 percent of respondents from Kishapu and 6.7 percent from Mvomero reported to make decision on the use of income they earn

on their own.

The pattern was nearly the same to male respondents from Kishapu and Mvomero districts with the majority coming from Kishapu district (79.8%). Generally, nearly a quarter of female respondents (23.5%) reported their spouses to be decision makers on the use of their earnings while nearly one third of male respondents (32.4%) reported to be the sole decision makers on the use of their earnings (Table 7.1).

Table 7.1: Decision-Maker on the use of Earned Money by Respondent (%)

Responses	**Women**		
	Total	**Kishapu**	**Mvomero**
Respondent	06.1	05.4	06.7
Husband	23.5	34.1	15.2
Joint decision making	45.7	33.3	55.5
Husband has no earning	24.6	27.1	22.6
N	**293**	**129**	**164**
	Men		
Respondent	32.4	19.4	42.7
Wife	01.0	00.8	01.2
Respondents and wife (jointly)	66.6	79.8	56.1
N	**293**	**129**	**164**

Chi-square for men current contraceptive use=6.317[a] significant at p<.05
Chi-square for men intention to use contraceptives in the future=9.286[a] significant at p<.05

There was a notable discrepancy in reporting among female and male respondents from Kishapu district with male reporting more than twice of the number of female that they make joint decisions. These results indicated that a good number of female respondents - especially those from Kishapu district, had low autonomy over the earnings they make. These findings differ from that obtained by TDHS (2010) that only 36 percent of women reported to make decision on the use of the money they own themselves, 47 percent indicatedjoint decision making and, 17 percent say that

the decision is made mainly by their husbands. This could be due to the fact that women in urban are more likely to take their own decision in the use of the money they earn than their counterparts.

However, this is not unique as according to Furuta and Swalay (2010) and UN (2010), women's lower control over household resourcesresults from limited participation in intra household decision-making on spending. The proportion of married women aged 15–49 not involved in decision making on how their own earnings are spent was found to be high particularly in some countries in sub-Saharan Africa and in Asia. In sub-Saharan Africa, the proportion of women with no say in how their own cash income is spent is greatest in Malawi (34%) followed by Democratic Republic of the Congo (28%), Liberia (23%), Rwanda (22%) and United Republic of Tanzania and Zambia (21%).

Several scholars (Bawah, 1999; Biddlecom, 1998; Fapohunda, 1999; Castle, 1999 and Alio, 2009) reported that in areas where wives' decision making is limited, family planning is not widespread, and there are differences in husbands' and wives' fertility preferences, as well as reports of substantial clandestine use of contraception. It is possible that women who have some control in financial matters have better access to these services than women who have little or no control (Kurimoto, 2012).

During focus group discussion, female respondents reported that they do not have much say on the money they earn as most of the time their husbands have control over it, as one respondent said:

> *"A woman is supposed to report to her husband about all the money she has, if not and accidentally a man finds some cash with her even if its 500 shillings he will beat her. If a woman is hard working and gets money, usually men take advantage of taking money from her and use it himself. If he has two wives he can take from the two or he can take from one of the wives and use it with the other wife* (Kishapu woman aged 33years)."

Chi-square results for men showed that there was significant association betweenwho make decision on the use of earned money by respondent and the contraceptive use (p=.042) and intention to use contraceptives in the future (p=.054) but not for family size. Nonetheless, there was no any significant association observed from women results (Table 7.1).

7.2.2 Couples Decision-Making on the use of Earned Money by Spouse

On the other side, when asked about who makes a decision on the money earned by their spouses, most females (59.7%) and males (75.4%) reported to be making decisions jointly. The same pattern was observed for both female and males from Kishapu and Mvomero districts. Nearly a quarter of female respondents (27.3%) reported their husbands as the decision makers while 21.2 percent of male respondents reported that they are the decision makers. Small proportion of female respondents (4.8%) reported to make decisions on their husbands' earnings and likewise, males (2%) reported that their wives make decisions on the earnings they make. The proportion of women who reported that their spouses had no earnings was higher compared to their counterparts (Table 7.2). Though most respondents reported joint decision-making, still results indicated that a good number of female

respondents especially from Kishapu district are accorded low decision making power over the earnings they make or the earnings made by their spouses. Respondents pointed out clearly that in most cases, though couples may discuss about the money earned, the final say is with the husband, as observed in the following comments;

> *"It is not proper for a man to decide on the use of money earned by her wife if he doesn't involve her in the use of his money. Sometimes you may wish to use it covertly but a man can go even to your employer to ask how much money he has paid you (wale wanaolima miraba)."*

Table 7.2: Decision Maker on the use of Money Earned By Spouse (%)

	Women		
Responses	**Total**	**Kishapu**	**Mvomero**
Respondent	4.8	2.3	6.7
Husband	27.3	39.5	17.7
Respondents and husband(jointly)	59.7	48.1	68.9
Husband has no earning	8.2	10.1	6.7
N	**293**	**129**	**164**
	Men		
Respondent	21.2	17.8	23.8
Wife	02.0	02.3	01.8
Respondents and wife(jointly)	75.4	79.8	72.0
Wife has no earning	01.4	-	02.4
N	**293**	**129**	**164**

Another respondent was quoted saying that some men may give their spouse earned money from farming for her to keep but she does not have a power to say no or otherwise when her husband asks for it:

"After selling cotton, all the money is given to the wife who is responsible of taking care of it. When the husband is in need for some he will have to ask from her wife. They just keep the money but they don't have much power on it. I can lie that I need money to buy a farm or another cow but I can use it for drinking alcohol and she can do nothing. (Kishapu man aged 47years)"

These findings are supported by those reported in TDHS (2010) that, married men in the Lake zone (65 percent) are most likely to make decisions autonomously regarding the use of their earnings. Joint decisions increase with the husband's education, while solitary decisions decrease. For example, married men with at least some secondary education are more likely than those with no education to make joint decisions on how to use their cash earnings (58 percent and 35 percent, respectively).

7.2.3 Couples Decision-Making on Respondents' Health Care

The results in Table 7.3 show that, nearly the same proportion of female and male respondents reported joint decision making (60.1% and 61.1%) respectively on their health care. The figures were highest for female respondents from Mvomero district (70.7%) and lower for female respondents from Kishapu district (46.5%). Generally, nearly a quarter of female respondents (26.6%) reported that their husbands are the ones making decisions for them. Female respondents from Kishapu district were the majority (39.5%).

The situation was different for men respondents as about one third (36.9%) reported to make health care decisions on their own. Small proportion of female respondents reported to make their own decision (13.3%) while small proportion of male

respondents (2%) reported that their wives are the ones responsible for their health care (Table 7.3). These findings are supported by those reported by TDHS (2010) that, 66 percent of men mainly make decisions about their own health care and 30 percent make them jointly. Only in rare instances females are decision makers on the men's health.

Although most of the respondents reported joint decision-making, a good number of female respondents had no autonomy over their health care, especially those from Kishapu district. For women to control their reproduction, they must first achieve social status and dignity, to manage their own health, sexuality and to exercise their basic rights in the society and in partnerships with men **(**Eguavoen *et al.,* 2007). Some respondents reported that they make decisions jointly with their spouses (especially women) regarding their health care, but in some cases if the spouse is not showing concern, they can just decide themselves to go to the health center if they have money to do so. For some they have to hold on until their spouses decide to help them, as noted in the following comments:

> *"Most of the decisions in the house are done by the husband. If a woman is having difficulties in giving birth, her husband can decide to let her be sterilized in order to save the costs of taking her to hospital now and then (Kishapu woman aged 48years)".*

Another respondent emphasized that men do not have much concern on the health of their wives until it gets worse, and as some women do not have money or cannot decide on their own then they have to wait for their husband to act:

"Many men do not care about their wives health until it gets worse. They do not want to spend money caring for their wives health. Many women bear all the problems they get from their husband because of the children (Kishapu woman aged 38years)"

Table 7.3: Decision-maker on Respondent's Health Care (%)

		Women	
Responses	**Total**	**Kishapu**	**Mvomero**
Respondent	13.3	14.0	12.8
Husband	26.6	39.5	16.5
Joint decision	60.1	46.5	70.7
N	**293**	**129**	**164**
		Men	
Respondent	36.9	37.2	36.6
Wife	02.0	02.3	01.8
Joint decision	61.1	60.5	61.6
N	**293**	**129**	**164**

7.2.4 Couples Decision-Making on Respondents' Contraceptive Use

The findings further showed that the majority of respondents (73.9% females and male 82.4%) make joint decisions on contraceptive use. This was followed by those who reported to making their own decisions. This pattern was observed for both females and males from Kishapu and Mvomero districts (17.5% and 14.1% respectively). A small proportion of female respondents (8.6%) and 3.4 percent of male respondents reported their spouses to be decision makers regarding contraceptive use (Table 7.4). Those who make their own decisions could be attributed to the fear that their spouses will not agree if they discuss about it or being uneasy discussing about such issues as traditionally women are not expected to raise

such issues. Those who rely on their husbands or wives to decide, it is not easy for them to plan for their family size as they do not have a say on contraceptive use and this may lead to covert use of contraceptives as they may participate in the discussion but they don't have the final say (Table 7.4).

Table 7.4: Decision-Maker on Respondent Contraceptive Use (%)

		Women	
Responses	**Total**	**Kishapu**	**Mvomero**
Myself	17.5	19.1	16.3
Husband	08.6	11.8	06.1
Respondents and husband (jointly)	73. 9	69.1	77.6
N	**257**	**164**	**147**
Chi-square for women intention to use contraceptives in the future=9.933[a] significant at p<.05			
		Men	
Myself	14.1	10.9	16.9
Wife	03.4	04.7	02.5
Respondents and wife (jointly)	82.4	84.5	80.6
N	**289**	**129**	**160**

These findings are supported by Eguavoen (2007), who posits that fertility control like most other family decisions is not always an individual affair but involves co-operation, discussion and joint decision making among couples. In a multcountry study conducted in Ghana, Namibia, Uganda, and Zambia by Do and Kurimoto (2012) it was revealed that, men's negative attitudes toward contraceptive use have been documented in several literatures. In their study about 43 percent of Namibian men and 46 percent of Ghanaian men believed that a woman who uses contraceptives may become promiscuous. This was supported by another study conducted in Pakistan by Sultana and Qazilbash, (2004) which found out that in Pakistan decisionmaking about reproductivematters resides primarily with the husbandand hence the achievement of their own desire for a large family.

Female respondents in the current study blamed their male counterparts that they were normally not willing to discuss issues related to family planning because they did not want their wives to use contraceptives. But in some cases, they did discuss but mostly on female contraceptive methods. This was also noted during focus group discussion that sometimes couples discuss on contraceptive use but they normally discuss contraceptives used by women. One male respondent had the following to say:

> *"Both husband and wife decides on the use of contraceptives and always the discussion is on the use of female contraceptive use and occasionally on rhythm method." (Mvomero man aged 28years)"*

Statistically, chi-square resultsfor women revealed that there was significant association betweenwho make decision on whether respondent should use contraceptive or not and intention to use contraceptives in the future (p=.042) but not for current contraceptive use and family size. Nevertheless, there was no any significant association observed from men results (Table 7.4).

7.2.5 Couples Decision-Making on Spouses' Contraceptive use

The same pattern was observed when couples were asked to mention a person who makes decisions on their spouses' use of contraceptives. About 76.6 percent of female respondents and 91.8 percent of male respondents from Kishapu and Mvomero districts reported joint decision making. Nearly seventeen percent (17.1%) of female respondents reported that their spouses make decision on their own while only 3.7 percent of male respondents reported their spouses also decide on their own.

Observed discrepancy between male and female reporting indicates the presence of covert use of contraceptives for women, especially from Mvomero district (Table 7.5). In Namibia, a mul-ticountry study found that approval of family planning by both spouses was significantly associated with women's use of any modern contraceptive method (Gebreselassie, 2007).

Table 7.5: Decision-Maker on Spouse Contraceptive use (%)

		Women	
Responses	**Total**	**Kishapu**	**Mvomero**
Spouse	17.1	09.9	23.0
Respondent	06.3	09.9	03.4
Joint decision	76.6	80.3	73.6
N	**158**	**120**	**138**
		Men	
Spouse	03.7	02.5	04.9
Respondent	04.5	04.2	04.9
Joint decision	91.8	93.3	90.2
N	**243**	**120**	**123**

It is plausible that some women feel empowered because contraceptive use gives them a sense of being capable of controlling their fertility, and the use of female methods may result in increased perceived empowerment among these users, therefore womencould use female methods without any discussion with or involvement of their partners (Do and Kurimoto, 2012). Eguavoen*et al.,* (2007) emphasize that existing attitude, cultural and religious beliefs about sex, reproduction and women's right to protect them limits her ability to control and participate in decision-making with regards to the determination of fertility behaviour. They further argued that fertility control - like most other family decisions, is not always

an individual affair but involves co-operation, discussion and joint decision making among couples, though the nature of relationship existing among the couples affects the decision on family size.

7.2.6 Couples Decision-Making on Major Household Purchase

It was noted from the results that both female and male respondents reported joint decision making on major household purchases (62.5% and 78.8%). Men from Kishapu district were the majority (80.6%) and women were 51.2 percent. Nearly one third of female respondents (32.1%) reported that their husbands were the sole decision makers on major purchases with the majority coming from Kishapu districts (45%). Many men (16.8%) reported to make decisions on their own while only 5.5 percent of women reported to do the same (Table 7.6).

Table 7.6: Decision Maker on Major Household Purchase (%)

Responses	**Women**		
	Total	**Kishapu**	**Mvomero**
Respondent	5.5	03.9	06.7
Husband	32.1	45.0	22.0
Joint decision	62.5	51.2	71.3
N	**293**	**129**	**164**
	Men		
Respondent	16.8	15.5	17.8
Wife	04.5	03.9	04.9
Joint decision	78.8	80.6	77.3
N	**292**	**129**	**163**

Though most of both female and male respondents reported joint decisions, these results showed that a large proportion of women have low decision making power

especially in Kishapu district regarding major purchases in the household. These findings differ from those in TDHS (2010) which reported that, majority of men make decisionson major household purchases by themselves (57 percent) or in consultation with their wives (36 percent) while only 7 percent of women do so.

7.2.7 Couples Decision-Making on Respondent Visit to Family or Relatives

With regard to respondents' visits to their relatives, respondents from both Kishapu and Mvomero districts generally reported joint decision making with their spouses with female (61.4%) and male (80.5%). Apart from the majority reporting joint decision making, more than a half of female respondents from Kishapu district (52.7%) reported that their husbands are the ones to decide whether they should visit their relatives or not. Nearly eighteen percent (18.1%) of male respondents reported to make their own decision while only 3.8 percent of female respondents reported to do so (Table 7.7).

Table 7.7: Decision-Maker on Respondents Visit to Family or Relatives (%)

Responses	**Women**		
	Total	**Kishapu**	**Mvomero**
Respondent	03.8	04.7	03.1
Husband	34.5	52.7	20.1
Respondent and husband (jointly)	61.4	41.9	76.8
Father in law	00.3	00.8	-
N	**293**	**129**	**164**
	Men		
Respondent	18.4	19.4	17.8
Wife	00.7	00.8	00.6
Respondent and wife (jointly)	80.5	79.1	81.7
Father	00.3	00.8	-
N	**244**	**121**	**123**

These findings connote that apart from the majority reporting joint decision making, still a good proportion of female respondents especially from Kishapu district have low decision making power on whether they should visit their relatives or not. Al Riyami *et al.*, (2004) reported associations between women's contraceptive use and some measures of their involvement in decision making and freedom of movement.

In addition, Govindasamy and Malhotra (1996) as cited by Alam *et al*., (2013) reported that among Egyptian women, having freedom of movement, having at least some control in household matters and budget decisions, and being involved in family planning decision-making were all positively related to current use of contraceptives. Women are not allowed to go to visit their relatives or friends without permission from their husbands. This was reported during focus group discussions by both men and woman from Kishapu as indicated in these comments:

> *"Men are in control of women's movement as well. If a woman wants to visit her parents she will have to ask her husband and if the husband will say no, then she will not go. But again if she is having a small child, a husband will instruct the child on a number of days to stay there. Once they are there they will stay in peace for the given days but in case the mother decides to add some more days, the child will cry a lot and she will not stop crying until they return home (Kishapu woman aged 40years). "*

Another respondent reported fear and mistrust of men when their wives go to visit friends and relatives:

"Normally men do not allow their wives to go and visit their parents or relatives for the fear of women to cheat with other men, but also the fear that she will go and tell her relatives the way her husband is mistreating her (if he mistreats her) and that they will teach her what to do, so that they can get divorced (Kishapu woman aged32years)."

Men respondents insisted in their role as decision maker in the family for various issues as follows:

"Most decisions are made by man, even if she wants to travel for any reasons what so ever, she cannot go until I say so, and not only that but also I am the one to decide whether to sell livestocks or farms (Kishapu men aged 42years) ".

Some of the respondents reported joint decision making on various issues, though the woman may be involved in discussion but not the final say. She will have to agree with her husband decisions as reported by this respondent:

"All matters regarding going to visit family friends and relatives lies upon husband's decision. A woman will just ask for permission and will have to wait and hear what her husband will have to say (Kishapu man aged 52yrs)".

This respondent emphasized that:

"Decision making for various issues is done jointly, though I think it was much more in the past than nowadays as in the past even the decision to have another wife was a matter of agreement with both husband and wife but not now."Mvomero men aged 36years)".

7.2.8 Index of Couple's Decision Making on Various Issues

An index was prepared in order to find out who among the couples have more autonomy on decision making about various issues in the household and whether there is any connection with contraceptive use and family size.

The results in Table 7.8 revealed that the majority of both women and men had very low autonomy (85.2% and 81.3%). The same pattern was observed district wise with lightly difference among couples and between districts. Men were found to have high autonomy as compared to women in both Kishapu and Mvomero districts (13.3% and 13.2%). These findings could be a result of joint decision making on various issues as reported by respondents in individual items (Table 7.2.1-7.2.7).

Table 7.8: Respondents Level of Decision Making by Gender and District (%)

Level of decision making	Women			Men		
	Total	**Kishapu**	**Mvomero**	**Total**	**Kishapu**	**Mvomero**
High	10.1	09.1	10.8	13.3	13.3	13.2
Medium	04.7	09.1	01.2	05.4	06.9	04.1
Low	85.2	81.8	88.0	81.3	80.0	82.6
N	**149**	**66**	**83**	**241**	**120**	**121**

7.2.9 Index of Couple's Decision Making on Various Issues and Contraceptive Use

The results in Table 7.9 show that, current contraceptive use was found to be highest among women (83.3%) and men (81.3%) from Kishapu who had high level of autonomy regarding decision making on various issues in the household, but not for Mvomero respondents (Table 7.9).

These results indicate that for respondents from Kishapu, their contraceptive use was associated with their level of autonomy but for respondents from Mvomero, there are some other reasons behind their contraceptive use. It was noted earlier that though couples reported joint decision-making but in most cases the husband has the final say, and this could be attributed to the large spouse age gap which exist in these two districts. Intention to use contraceptives in the future was high among couples from Kishapu with high level of autonomy as well as women respondent from Mvomero with high level of autonomy but not men as in Table 7.9. This could be due to cultural beliefs as well as attitude towards large family size for men more than women as well as big age differences between couples.

Table 7.9: Respondents Decision Making Level and Contraceptive Use (%)

Level of decision making	**Current use**					
	Women			**Men**		
	Total	**Kishapu**	**Mvomero**	**Overall**	**Kishapu**	**Mvomero**
High	53.3	83.3	44.4	87.5	81.3	43.8
Medium	42.9	33.3	100.0	61.5	37.5	100.0
Low	66.9	51.9	56.2	73.0	60.4	61.0
ALL(N)	**64.4(96)**	**53.0 (35)**	**55.4 (46)**	**74.3(179)**	**61.7(74)**	**60.3 (73)**
	Intention to use					
	Total	**Kishapu**	**Mvomero**	**Overall**	**Kishapu**	**Mvomero**
High	86.7	83.3	77.8	84.4	81.3	50.0
Medium	71.4	66.7	00.0	69.2	50.0	100.0
Low	81.1	68.5	75.4	82.7	72.9	71.0
ALL(N)	**81.2 (121)**	**69.7 (46)**	**74.7 (59)**	**82.2(198)**	**72.5(87)**	**69.4 (84)**

These findings are supported by a multcountry study conducted in Ghana, Namibia, Uganda, and Zambia by Do and Kurimoto (2012) where it was revealed that, men's negative attitudes toward contraceptive use have been documented in several

literatures. In their study about 43 percent of Namibian men and 46 percent of Ghanaian men believed that a woman who uses contraceptives may become promiscuous.

7.2.10 Index of couple's decision making on various issues and family size

The results in Table 7.10 revealed that the majority of women respondents (40%) with high decision-making power had 3-4 children as well as those with low level of decision-making (37%).

Table 7.10: Respondents Level of Decision Making and Family Size (All)

Level of decision making	**Women**					
	1-2	**3-4**	**5-6**	**7-8**	**9-10**	>10
High	20.0	40.0	26.7	13.3	00.0	00.0
Medium	28.6	28.6	42.9	00.0	00.0	00.0
Low	28.3	37.0	21.3	08.7	03.1	01.6
N	**41**	**55**	**34**	**13**	**04**	**02**
	Men					
	1-2	**3-4**	**5-6**	**7-8**	**9-10**	**>10**
High	31.3	31.3	9.4	15.6	3.1	9.4
Medium	38.5	23.1	23.1	07.7	00.0	7.7
Low	30.6	30.6	20.9	10.2	4.1	3.6
N	**75**	**73**	**47**	**26**	**09**	**11**

It was further revealed that women respondents with low level of autonomy had up to more than ten children. High fertility rate among respondents with low level of autonomy could be associated with low level of education as well as cultural factors like big age differences between couples. The majority of men with high and low level of autonomy had up to four children while those with medium level of autonomy had up to two children. However, a good number of respondents had up to

more than ten children in all categories, indicating that their family size have nothing to do with their level of autonomy.

Table 7.11 show that women respondents in Kishapu districts with high level of autonomy (66%) had up to four children while those with medium and low level of autonomy had five to six children and those with low level of autonomy had up to more than ten children. This is an indication that their family size has something to do with their level of autonomy. On the other hand, majority of men respondents from Kishapu with high to medium levels of decision making had three to four children while those with low level of decision making had five to six children. A good proportion of men respondents in all categories had more than ten children. This is an indication that their family size is not associated with the level of decision making respondents had.

Table 7.11: Respondents Level of Decision-Making and Family Size – Kishapu (%)

Level of decision making	**Women**					
	1-2	**3-4**	**5-6**	**7-8**	**9-10**	>10
High	00.0	66.7	16.7	16.7	00.0	00.0
Medium	16.7	33.3	50.0	00.0	00.0	00.0
Low	16.7	27.8	33.3	13.0	05.6	03.7
N	**10**	**21**	**22**	**08**	**03**	**02**
	Men					
	1-2	**3-4**	**5-6**	**7-8**	**9-10**	>10
High	18.8	31.3	12.5	18.8	6.3	12.5
Medium	25.0	37.5	25.0	00.0	00.0	12.5
Low	18.8	24.0	28.1	13.5	08.3	07.3
N	**23**	**31**	**31**	**16**	**09**	**10**

Majority of women respondents from Mvomero district - regardless of their level of decision making, had three or four children. Moreover, there were respondents with more than ten children in all the categories (Table 7.12). This is an indication that respondent's level of decision making was not associated with her family size. Results for men had slightly different pattern as majority of respondents with high level of decision making had (43.8%) had three to four children while those with medium level of decision making were 20% in all categories of family size with the exception of seven to eight children where there was none. Majority of men with low level of decision making had (26%) had five to six children. However, there were men respondents with more than ten children in all levels of decision making. These results indicate that for respondents from Mvomero, their family size was not associated with the level of decision making one has.

Table 7.12: Respondents Level of Decision-Making and Family Size-Mvomero (%)

Level of decision making	**Women**					
	1-2	**3-4**	**5-6**	**7-8**	**9-10**	**>10**
High	33.3	33.3	11.1	11.1	00.0	11.1
Medium	32.9	32.9	24.7	05.5	02.7	01.4
Low	32.9	32.9	24.7	05.5	02.7	01.4
N	**27**	**28**	**19**	**05**	**02**	**02**
	Men					
	1-2	**3-4**	**5-6**	**7-8**	**9-10**	**>10**
High	18.8	43.8	18.8	6.3	00.0	12.5
Medium	20.0	20.0	20.0	00.0	20.0	20.0
Low	25.0	24.0	26.0	10.0	08.0	07.0
N	**29**	**32**	**30**	**11**	**09**	**10**

7.3 Couples' Ownership of Property

This study however, enquired on the ownership of household property, mainly houses and land. The pattern of responses for the ownership of houses was almost the same for women respondents as they reported their husbands as the owners of the house (47.3% and 37.2%) for Kishapu and Mvomero districts respectively. These results were somehow similar to those of men as most men (46.8%) reported to own the houses with 50.4 percent from Kishapu district and 43.9 percent from Mvomero district. This was followed by respondents from both Kishapu and Mvomero districts who reported joint ownership of houses (38.2% and 35.5%) as in Table 7.13. These results indicate that women from both Kishapu and Mvomero districts are accorded low power of ownership of property specifically houses.

Almost sixty percent of women (59%) from Kishapu and Mvomero districts reported to ownland ownership and 84 percent of men from Kishapu and Mvomero districts reported the same. Though majority reported to own land, nearly sixty percent (69.7%) of female respondents from Kishapu district reported lack of land ownership (Table 7.13). This implies that women respondents from Kishapu are either not economically well or traditionally denied the power to own land as compared to their fellow women from Mvomero and men in general.

On the other side, about 87.4 percent of women respondents reported on joint ownership of land, while the same was reported by 66.4% of male respondents. Nearly one third of male respondents (33.6%) reported to be the sole owners of the household land (Table 7.13).

Table 7.13: Couple's Ownership of Property (%)

Responses	Ownership of property					
	Women			Men		
	Total	Kishapu	Mvomero	Total	Kishapu	Mvomero
	Ownership of the house					
I own it	1.4	0.8	1.8	46.8	50.4	43.9
Spouse own it	41.6	47.3	37.2	2.4	.8	3.7
Both	38.2	41.1	36.0	35.5	38.8	32.9
Rented	15.7	7.8	22.0	11.9	6.2	16.5
Owned by relative	3.1	3.1	3.0	3.4	3.9	3.0
Total	**293**	**129**	**164**	**293**	**129**	**164**
	Whether respondent have land					
Yes	59.0	40.3	73.8	84.0	77.5	89.0
No	41.0	59.7	26.2	16.0	22.5	11.0
Total	**293**	**129**	**164**	**293**	**129**	**164**
	Ownership of the land					
Alone	12.6	13.7	12.2	33.6	21.2	42.1
Joint ownership	87.4	86.3	87.8	66.4	77.8	57.9
N	**174**	**72**	**102**	**242**	**98**	**144**

The number of female respondents reporting joint ownership of land is much higher compared to male respondents indicating that some women respondents think the land is owned jointly but actually it is not.

This could be due to low women autonomy which does not give them power to question things like property ownership for fear of losing affection from their spouses, and traditionally the issue of ownership of household property is mans.

According to UN (2010), in most countries in Africa and about half the countries in Asia women are disadvantaged by statutory and customary laws in their access to land ownership and other types of property and data on property ownership are usually recorded at the household level in both censuses and household surveys.

However, where data were collected at individual level and disseminated disaggregated by sex of the owner, gender inequality becomes apparent. Women own land, houses or livestock less often than men, for example, in South-Eastern Asia the 2006 Survey on the Family in Viet Nam revealed that only a small proportion of houses and land titles are in the hands of women in that country. In urban areas 21 per cent of the house and residential titles are in the name of women, 61 per cent are in the name of men and 18 per cent are joint titles. In rural areas, 8 per cent of the farm and forest land titles are in the name of women, 87 per cent are in the name of men and 5 per cent are joint titles.

This situation was more prominent in Kishapu than Mvomero as in Mvomero traditionally they used to be matrilineal and the issue of land ownership was more for women than men as noted in the following comments by respondents during focus group discussions;

> *"Female children are given family farms unlike male children. Male children are told to wait until they marry so that they can get land from their wives, and they are not allowed even to sell any piece of land unless they bought it and so it is theirs but not for family land (Mvomero woman aged37years)".*

Comments from men were not that different from women as they also insisted in the traditional way of ownership of property citing an example of land as reported by the following:

> *"When male children are in need of economic assistance, they go back to their sisters and that is when a sister can decide to give him a piece of land to cultivate and stay there, but when things go well again he can leave the place and move on (he will be required to return that piece of land and not to sell it)- (Mvomeroman aged 41years).*

Another man fom Mvomero emphasized the importance of men to be careful where they are going to marry in order to avoid such shame when things go wrong:

> *"We men are supposed to be very careful where we are going to start life once we get married so that we cannot be tied up when things go wrong (death of the wife or divorce). This is because if the land is hers you will have to leave the place and go to buy another place that will belong to you (Mvomero men aged 50 years)"*

7.3.1 Couples Ownership of Property and Contraceptive Use

A link was established between property ownership and contraceptive use. About sixty percent (60%) of women respondents who were current contraceptive users from Kishapu district were those who reported to be renting the houses they live. For Mvomero district it was those who reported to live in the houses owned by their relatives (80%). The situation was different for men as majority of current contraceptive users from Kishapu district were those who reported that their wives

own the houses they live in (100%) followed by those who reported to live in the houses they own themselves (61.5%). Men respondents from Mvomero district who were the highest current contraceptive users were those reported to live in the houses owned by their relatives (80%). Generally women who reported to be renting (63%) and men who reported to own the houses (68.6%) were the major contraceptive users (Table 7.14). These results did not suggest any relationship between ownership of houses and contraceptive use as there was no specific pattern observed.

The intention to use contraceptives was high among women from Kishapu district who lived in houses owned by their relatives (100%), followed by those who rented the houses (90%). For Mvomero district it was those who lived in their relatives houses (80%) followed by those whom their husbands own the houses (79.3%). Men respondents with highest intention to use contraceptives in the future were (100%) from Kishapu district who their wives own the houses followed by (80%) who live in houses owned by relatives. For Mvomero men (100%) were those living in the house owned by relatives followed by 74.1 percent who live in rented houses and houses owned by both couples (Table 7.14).

With reference to ownership of land, the majority of the respondents (83.3%) with the highest intention to use contraceptives in the future - were women from Kishapu district who reported to own the land themselves and (65.3%) from Mvomero district who reported joint ownership of land.

Table 7.14: Couple's Ownership of Property and Contraceptive Use (%)

Response	Current contraceptive use					
	Women			Men		
	Total	Kishapu	Mvomero	Total	Kishapu	Mvomero
	Ownership of the house					
I own it	25.0	-	33.3	68.6	61.5	54.2
Spouse own it	59.8	47.5	57.4	57.1	100.0	50.0
Joint ownership	58.9	49.1	39.0	65.4	56.0	61.1
Rented	63.0	60.0	52.8	62.9	50.0	63.0
Owned by relative	44.4	25.0	80.0	40.0	40.0	80.0
ALL(N)	**63.2(110)**	**48.1(62)**	**50(82)**	**65.5(192)**	**58.1(75)**	**58.5(96)**
	Ownership of the land					
Alone	72.7	71.4	53.3	67.1	52.4	55.7
Joint ownership	61.8	45.5	44.4	64.4	55.8	57.8
ALL(N)	**59(173)**	**48.1(62)**	**45.5(56)**	**65.6(160)**	**58.1(75)**	**57.2(83)**
	Intention to use contraceptives in the future					
	Ownership of the house					
I own it	25.0	-	50.0	78.0	72.3	63.9
Spouse own it	73.1	62.1	79.3	28.6	100.0	66.7
Joint ownership	77.6	68.8	62.1	75.0	68.0	74.1
Rented	93.5	90.0	67.7	91.4	75.0	74.1
Owned by relative	100	100.0	80.0	90.0	80.0	100.0
ALL(N)	**78.8(134)**	**67.2(80)**	**70.1(108)**	**77.8(228)**	**71.3(92)**	**70.1(115)**
Chi-square for women intention to use contraceptives in the future=23.980[a] significant at p<.05 Chi-square for men intention to use contraceptives in the future=22.008[a] significant at p<.05						
	Ownership of the land					
Alone	90.5	83.3	64.3	79.3	66.7	62.3
Joint ownership	77.2	56.1	65.3	75.6	67.5	72.3
ALL(N)	**78.1(221)**	**67.2(80)**	**65.2(75)**	**77(108)**	**67.7(67)**	**68.3(99)**

Results for men revealed that the highest intention to use contraceptives in the future was among Kishapu and Mvomero districts respondents who reported joint ownership of land (67.5% and 72.3%) respectively. Generally, women and men

respondents who reported to own the land (90.5% and 79.5%) showed the highest intention to use contraceptives in the future (Table 7.14).

These results could be due to the sense of independence economically these respondents feel due to the ownership of land making them able to decide freely on their intention to use contraceptives in the future.

According to Pandey (2003), women property owners were more likely to adopt some form of family planning compared to women without ownership of property. When husbands control property, the obligation of adopting irreversiblecontraception fell on wives; 85 percent of the women adopted such contraceptive measures compared to only 15 percent of the men. In comparison, when women were sole owners, 56 percent of women and 44 percent of men adopted irreversible contraception. While it is less invasive for men to undergo Vasectomy, when not in control of property, women in greater number subject themselves to Laparoscopy, a more invasive surgical procedure.

The resultsfor both women and men revealed that there was a highy significant association betweenwho own the house and intention to use contraceptives in the future (p=.002 and p=.005) but not for current contraceptive use. Nevertheless, there was no any significant association observed from both women and men results on the ownership of land as in Table 7.14.

7.3.2 Couples Ownership of Property and Family Size

Obtained results revealed that majority of female respondents whom their spouses are the owners of the houses they live in had small to moderate family size while those who reported joint ownership had large family size of more than six children. Respondents who reported to live in the house owned by their relatives had the smallest family size as compared with the rest. Indicating that couples who does not own houses are likely to have a small family size as compared to those who does (Table 7.15).

Further results showed that most females who reported joint ownership of land were the majority throughout, signifying no link between land ownership and family size. Respondents with moderately small family size were those reported to own the land though statistically there was no any observable link (Table 7.15). Property ownership is seen as instrumental in increasing women's self-confidence, contribution to household decisions, control over their reproductive life, access to capital, and overall economic independence (Agarwal, 1994a; Blackden & Bhanu, 1999; UNDP, 1996; World Bank, 1999) as cited by Pandey (2003).

Property ownership strengthens women's economic positions, empowers them and liberates them from abusive situations. Asset control also can give women greater bargaining power within households and help protect against the risk of domestic violence. A research conducted in Kerala, India, found that 49 percent of women with no property reported physical violence compared to only 7 percent of women who did own property (Panda, 2002).

Table 7.15: Couples Ownership of Property and Family Size (%)

Responses	Women					
	1-2	**3-4**	**5-6**	**7-8**	**9-10**	**>10**
Ownership of house						
I own it	02.2	-	1.7	03.8	-	-
Spouse own it	38.0	43.9	44.8	38.5	50.0	-
Joint ownership	28.3	39.3	43.1	50.0	50.0	100
Rented	23.9	15.0	10.3	07.7	-	-
Owned by relative	07.6	01.9	-	-	-	-
N	**92**	**107**	**58**	**26**	**8**	**2**
Ownership of land						
Alone	15.7	12.3	15.8	-	-	-
Joint ownership	84.3	87.7	84.2	100	100	100
N	**51**	**65**	**38**	**14**	**5**	**1**
	Men					
Ownership of house						
I own it	38.0	48.2	45.0	58.1	61.5	-
Spouse own it	05.4	-	1.7	3.2	-	-
Joint ownership	23.9	40.0	46.7	38.7	30.8	33.3
Rented	23.9	11.8	05.0	-	-	-
Owned by relative	08.7	-	01.7	-	07.7	-
N	**92**	**85**	**60**	**31**	**13**	**12**
Chi-square for men family size=49.998[a] significant at p<.05						
Ownership of land						
Alone	47.0	35.1	15.7	33.3	27.3	33.3
Joint ownership	53.0	64.9	84.3	66.7	72.7	66.7
N	**66**	**74**	**51**	**30**	**11**	**12**
Chi-square for men family size=23.681[a] significant at p<.05						

On examining data primarily from South Asia, Agarwal (2003) indicates that the gender gap in ownership and control over property is the most important factor affecting women's economic, social and psychological well-being and overall empowerment. Moreover, a report by Pandey (2003) revealed that gender inequalities in property ownership restrict women's access to education and to

informal information networks that spread knowledge of new technologies including contraceptive use.

It was further argued that property builds confidence and self-esteem. About six percent of respondents felt that owning property gives them the confidence they need to become financial contributors or to confidently offer their opinions in household decision-making processes. A 35 year old woman with property indicated that, “property gives a woman the confidence to do something on her own”. These explanations indicate that when women have autonomy in decision making they can freely be able to use contraceptives and hence control fertility level.

However, the results for males showed that the majority of respondents who reported to own the houses they live in were the majority in almost all categories - indicating a link between ownership of the house and family size. Male respondents who reported joint ownership of land were the majority in all categories with largest family size, indicating a direct link between ownership of land and family size (Table 7.15).

Chi-square resultsfor men revealed that there was highly significant association betweenwho own the house (p=.002) as well as who own the land (p=.008) and family size. However, the results for women showed no significant association between ownership of house and land and family size (Table 7.15).

7.3.3 Logistic Regression Results

Logistic regression was conducted to predict intention to use contraceptives in the future using property ownership as the predictor. A test of full model against a constant only model was statistically significant, indicating that predictors as a set reliably distinguished respondents who intend to use contraceptives in the future and those who do not (Chi-square 13.617. p=.001 with df=2). Nagelkerke's R^2 of 7.2% indicated a weak relationship between prediction and grouping. However, prediction success overall was 78.1% for intention to use contraceptives in the future. The Wald Criterion demonstrated that women ownership of house made a significant contribution to prediction (p=.001). Women who own a house were 2.034 times more likely to intend to use contraceptives than the rest, therefore rejecting null hypothesis (Appendix VIIc-1).

Ownership of property was used also to predict family size. A test of full model was not statistically significant, indicating that predictors as a set was reliably distinguished respondents with small family size and those with large family size (Chi-square 5.713. p=.057 with df=2). Nagelkerke's R^2 of 2.7% indicated a weak relationship between prediction and grouping. However, prediction success overall was 68.3% for family size. The Wald Criterion demonstrated that women ownership of house made a significant contribution to prediction (p=.028). Women who own a house were 0.703 times more likely to have a small family size, therefore rejecting null hypothesis (Appendix VIIc-2). However, results for men had a Chi-square of 11.704, and p=.003 with df=2. Nagelkerke's R^2 of 5.3% indicated a weak relationship between prediction and grouping. However, prediction success overall

was 60.4% for family size. The Wald Criterion demonstrated that men ownership of land made a significant contribution to prediction (p=.039). Men who own land were 2.269 times more likely to have a small family size, therefore rejecting null hypothesis (Appendix VIId).

7.4 Attitude towards Wife Beating

Respondents were given a series of attitudinal statements and their responses were used to determine the attitude they have towards wife beating. The results showed that majority of women (51.5%) and nearly a quarter of men respondents (24.2%) were in the opinion that a woman should be beaten if her husband found out that she uses contraceptives covertly. Almost fifty one percent of women (51.5%) believed that a woman deserve to be hit if she argues with her husband and nearly a quarter of men respondents (23.9%) also agreed with that contention. A good number of women respondents (41.3%) supported the idea that a woman deserve to be hit if she refuses to have sex with his husband but the overwhelming majority of men respondents (89%) were against it (Table 7.16).

These results are a sign of positive attitude towards wife beating in both women and men in both districts. Accepting that a woman deserves to be punished by beating her whenever she does something wrong is a sign of positive attitude towards wife beating. This is also an indication that women have low power regarding contraceptive use, freedom to air her views and on whether to have sex or not, as it seems women do make sex with their husbands unwillingly for the fear of being beaten.

Table 7.16: Responses on Respondent's Attitude towards Wife beating (%)

Attitudinal Statements	Responses (N=293)					
	Agree (Men)	Agree (Women)	Uncertain (Men)	Uncertain (Women)	Disagree (Men)	Disagree (Women)
Husband should beat his wife if he found out that she uses contraceptive covertly	24.2	51.9	00.3	00.7	75.4	47.4
Husband is not allowed to beat his wife if she goes out without telling him	59.7	51.2	04.8	02.0	35.5	46.8
A woman should not be hit by her husband if she neglects the children	55.6	32.8	03.8	05.5	40.6	61.8
A woman deserve to be hit if she argues with her husbands	23.9	51.5	07.5	04.4	68.6	44.0
Husband should beat his wife if she refuses to have sex with him	08.5	41.3	02.4	01.0	89.0	57.7
Husband should not beat his wife if she burns food	64.2	67.2	00.7	00.1	35.2	31.7

On the other hand, most women and men respondents (51.2% and 59.7% respectively) agreed that the husband is not allowed to beat his wife if she goes out without telling him. Most men (55.6%) were on the opinion that a woman should not be hit by her husband if she neglects the children, but strangely 61.8 percent of women believe that she deserves to be hit. When asked to give their opinions on whether a husband should not beat his wife if she burns food, the majority of both men (64.2%) and women (67.2%) respondents agreed though a good proportion were against it (Table 7.16).

Rejection of some positive statements, even one of them, indicates that these respondents were in favour of wife beating especially if a woman goes out without

telling her husband, if she neglects the children and when she burns foods. These results signify low autonomy accorded to women in these two districts.

District wise results showed that 62 percent of women respondents from Kishapu district believe that the husband should beat his wife if he found out that she uses contraceptive covertly while for Mvomero district 44.1 percent believed so. When asked whether it is acceptable for a woman to be hit if she argues with her husband majority of women respondents from Kishapu district (58.9%) and 45.7 percent from Mvomero district agreed. About 43.3 percent of respondents from Kishapu and 51.2 percent from Mvomero district were on the opinion that a woman deserves to be hit when she goes out without telling her husband. When asked whether a husband should beat his wife if she refuses to have sex with him, though not the majority nearly 46.5 percent of women from Kishapu district and 37.2 percent from Mvomero district were in the opinion that they deserve to be hit (Table 7.17).

Looking into positive statements, the majority of women respondents from Mvomero district (53.7%) and 48.1 percent of respondents from Kishapu district agreed that husband is not allowed to beat his wife if she goes out without telling him. When asked whether a woman should not be hit by her husband if she neglects the children 27.1 percent of women respondents from Kishapu district and 37.2 percent of respondents from Mvomero district agreed but the majority were against it. Almost sixty percent of respondents (58.9%) from Kishapu and 73.8 percent from Mvomero were in the opinion that a husband should not beat his wife if she burns food (Table 7.17).

Table 7.17: Responses on Women Attitude towards Wife Beating (%)

Attitudinal Statements	Women responses (N=293)					
	Agree (Kishapu)	Agree (Mvomero)	Uncertain (Kishapu)	Uncertain (Mvomero)	Disagree (Kishapu)	Disagree (Mvomero)
Husband should beat his wife if he found out that she uses contraceptive covertly	62.0	44.1	00.8	00.6	37.2	55.3
Husband is not allowed to beat his wife if she goes out without telling him	48.1	53.7	00.8	03.0	51.2	43.3
A woman should not be hit by her husband if she neglects the children	27.1	37.2	00.8	09.1	72.1	53.7
A woman deserve to be hit if she argues with her husbands	58.9	45.7	00.8	07.3	40.3	47.0
Husband should beat his wife if she refuses to have sex with him	46.5	37.2	-	1.8	53.5	61.0
Husband should not beat his wife if she burns food	58.9	73.8	-	1.8	41.1	24.4

These results point out that women respondents from both Kishapu and Mvomero districts had positive attitude towards wife beating as most of them supported some negative statements and some were against some positive statements, it further shade light on the low status of women in these two districts and especially in Kishapu (Table 7.17). Nigatu *et al*., (2014) believed that, when women have more autonomy, maternal and child health will improve, fertility and child or infant mortality will decline and population growth rate will reduce and that advancing gender equality, empowerment of women, elimination of all kinds of violence against women, and ensuring women's ability to control their own fertility, are corner-stone of population and development related programmes.

The results in Table 7.18 on negative statements revealed that 34.1 percent of male respondents from Kishapu agreed that a husband should beat his wife if he found out that she uses contraceptive covertly compared to 16.4 percent of respondents from Mvomero district. Nearly a quarter of respondents from Kishapu and Mvomero districts (24.8% and 23.2% respectively) believe that a woman deserves to be hit if she argues with her husband. A small proportion of respondents from Kishapu and Mvomero districts are in favour of wife beating when she refuses to have sex.

Table 7.18: Responses on Men Attitude towards Wife Beating (%)

Attitudinal Statements	**Men responses (N=293)**					
	Agree (Kishapu)	**Agree (Mvomero)**	**Uncertain (Kishapu)**	**Uncertain (Mvomero)**	**Disagree (Kishapu)**	**Disagree (Mvomero)**
Husband should beat his wife if he found out that she uses contraceptive covertly	34.1	16.7	-	00.6	65.9	82.7
Husband is not allowed to beat his wife if she goes out without telling him	49.6	68.9	02.3	06.7	48.1	24.4
A woman should not be hit by her husband if she neglects the children	52.7	63.4	01.6	05.5	45.7	31.1
A woman deserve to be hit if she argues with her husbands	24.8	23.2	01.6	12.2	73.6	64.6
Husband should beat his wife if she refuses to have sex with him	07.0	09.8	01.6	03.0	91.5	87.2
Husband should not beat his wife if she burns food	43.4	70.7	00.8	00.6	55.8	28.7

For the positive statements, nearly half of respondents from Kishapu district (48.1%) and about a quarter of respondents from Mvomero district (24.4%) believe that a

woman deserves to be hit if she goes out without telling her husband. More than half of respondents from Kishapu district (55.8%) and about a quarter (28.7%) from Mvomero deem acceptable for a husband to beat his wife if she burns food (Table 7.18). These results are an indication that like women, men respondents also have positive attitude towards wife beating especially in Kishapu as compared to Mvomero district.

Comparing men and women's results, it is more likely that couples do not understand each others well as most women think they deserve to be beaten on various situations while men think that women do not deserve to be beaten in the same situations. A good example is when women respondents from Kishapu (46.5%) and from Mvomero (37.2%) believed a woman deserves to be hit when she refuses to have sex with her husband while only 7 percent of male respondents from Kishapu and nine 9.8 percent from Mvomero districts supported the contention. This could also be attributed to low status of women in both Kishapu and Mvomero districts, as well as cultural issues which discourage women to question their husband regarding various issues.

This is supported by a UN (2010) report which concluded that, attitudes of women in regard to the violence to which they are exposed in their marriages and other intimate relationships is still largely based on concepts and constructs that heavily favour inequity and dominance of men in quite a few regions of the world. Statistics document that the impact of these misconceptions varies significantly among regions

and societies; yet, it is clear that, even if the numbers of women under their influence is small, they still persist almost everywhere.

During focus group discussions respondents made clear that wife beating exists though sometimes it is not easy for people to acknowledge that as explained by some respondents;

"Few men do beat their wives (it is not a very common practice), it occurs especially for women who do not follow what their husbands are advising them…ni sawa kama hasikii… (Mvomero woman aged 47years)."

It was also reported that men also get beaten sometimes but they do not talk about it so it is not easy to know, and sometimes what happens is that women can be punished by other means as reported;

> *"Wife beating is common but sometimes men also can be beaten, it real depends on the situation. Sometimes instead of beating her she can be given complex exercises until she gets pains, she can be squeezed until she cries out or her clothes can be removed and throw her out. For instance there was this alcoholic husband who used to beat his wife daily, but one day her wife waited until he was asleep and she pulled his manhood and slashed it several times with a razor bladder in order to punish him for all the beatings he has been giving her (Mvomero man aged 33years)"*

7.4.1 Index of Attitude towards Wife Beating

In order to know the attitude of respondents towards wife beating, respondents were asked a series of attitudinal questions related to wife beating. For the summary

measure to be obtained, an index of attitude towards wife beating was developed. Responses were grouped into three categories namely; agree, uncertain and disagree. In all positive statements every 'Agree' response was represented by 3, while 'uncertain' was presented by 2 and 'Disagree' was presented by 1. For all negative statements every 'Agree' response was represented by 1, while 'uncertain' was presented by 2 and 'Disagree' was presented by 3. The obtained index ranged from 6 to 18. It was further categorized into negative, neutral and positive; where by a score of 6 to 11 were considered negative, 12 neutral and 13-18 positive.

The results showed that nearly half of women respondents (50.8%) and 70 percent of male respondents had positive attitude towards wife beating followed by negative attitude (38.4% and 18.4% respectively) as in Table 7.19.

Table 7.19: Level of Attitude towards Wife Beating (%)

	Women			**Men**		
Level	**Total**	**Kishapu**	**Mvomero**	**Total**	**Kishapu**	**Mvomero**
Positive	50.8	49.6	51.8	70.0	58.9	78.7
Neutral	10.8	13.0	8.5	11.6	18.6	6.1
Negative	38.4	37.2	39.6	18.4	22.5	15.2
N	**293**	**129**	**164**	**293**	**129**	**164**

The pattern was the same to women respondents from Kishapu and Mvomero districts as about 49.6% of women from Kishapu and 51.8 percent from Mvomero districts had positive attitude towards wife beating. The same was observed to men

as 58.9 percent of men respondents from Kishapu and 78.7 percent from Mvomero had positive attitude towards women beating (Table 7.19).

These findings were also conformed by one of the elders who reported that:

> *"In the past even the divorce rate was very low as tolerance level for women was very high eg. My own mother was used to be beaten a lot by my farther but yet she stayed. Now days young people can not tolerate such beatings and as a result they don't stay long in their marriages (Kishapu elder aged* 71yrs)"

According to UN (2010) report, women are abused physically and sexually by intimate partners at different rates throughout the world yet such abuse occurs in all countries or areas, without exception. Younger women are more at risk than older women and since the consequences of such violence last a lifetime it has a severely adverse impact on women's family and social life.

7.4.2 Attitude towards Wife beating and Contraceptive Use

Attitude towards wife beating was further related to contraceptive use, and the results revealed that the highest users of contraceptives currently are women and men respondents with neutral attitude towards wife beating (74.2% and 77.1%). The difference on contraceptive use between those with positive and negative attitude was small. About 76 percent of current women contraceptive users from Kishapu district and 78.6 percent from Mvomero district were those with neutral attitude. For men respondents from Kishapu, about 83.3percent had neutral attitude towards wife beating while 76 percent from Mvomero had negative attitude (Table 7.20).

Table 7.20: Level of Attitude towards Wife beating and Contraceptive use (%)

	Current contraceptive use					
	Women			Men		
Level	**Total**	**Kishapu**	**Mvomero**	**Total**	**Kishapu**	**Mvomero**
Positive	57.9	41.7	51.8	63.9	52.6	55.8
Neutral	74.2	76.5	78.6	77.1	83.3	50.0
Negative	56.6	45.3	41.5	64.3	51.7	76.0
ALL(N)	**59.0**	**48.1**	**50**	**65.5**	**58.1**	**58.5**
	Intention to use contraceptives in the future					
Level	**Total**	**Kishapu**	**Mvomero**	**Total**	**Kishapu**	**Mvomero**
Positive	77.3	55.8	76.3	80.2	69.7	68.2
Neutral	74.2	82.4	78.6	80.0	91.7	60.0
Negative	79.8	71.2	60.9	67.9	58.6	84.0
ALL(N)	**78.1**	**67.2**	**70.1**	**77.8**	**71.3**	**70.1**

These results indicate that there is no association between current contraceptive use and attitude towards wife beating as it was expected contraceptive use to be low especially to those respondents with positive attitude towards wife beating or to be higher among those with negative attitude towards wife beating.

According to Do and Kurimoto (2012) fears of domestic and intimate partner violence have been reported in many settings as a barrier to contraceptive use. In addition, in studies conducted in Ghana by Ezeh (1993); Bawah (1999); Phillips (2006) and Akafuah (2008) showed that many Ghanaian women who used contraceptives feared physical abuse and reprisals not only from their husbands, but also from members of their extended family.Furthermore, in a study conducted in Ghana by Ezeh (1993) as cited by Do and Kurimoto (2012) reported that men

thought it was acceptable to beat their wives if they adopted family planning. In Uganda, men's disapproval of family planning was cited as a reason for not using contraceptives by some women (Khan *et al*., 2008).

Experience with domestic and intimate partner violence is also an important factor that may prevent women from practicing contraception as reported by Kaye *et al., (*2006). It was further reported in one Ugandan study that many participants agreed that violence against women should be expected if women's use of contraceptives was identified or even suspected without husbands' approval. But another study in this country reported that more women than men (27% and 22%) justified domestic violence if a woman adopted a contraceptive method without her husband's approval (Koenig, 2003).

The majority of women respondents with high intention of using contraceptives in the future were those from Kishapu district with neutral attitude towards wife beating (82.4%) and 78.6 percent from Mvomero district. Men with the highest intention to use contraceptives in the future were 91.7 percent from Kishapu district with neutral attitude towards wife beating and 84 percent from Mvomero district had negative attitude towards wife beating (Table 7.20). This is an indication that the same people who are currently using contraceptives are the ones with the intention to use contraceptives in the future and that there is no notable association between level of attitude towards wife beating and contraceptive use as expected.

The intention to use contraceptives was high in all categories, with the majority being 79.8 percent of women who had negative attitude towards wife beating and

80.2 percent of men who had positive attitude towards wife beating (Table 7.20). This means that regardless of the attitude they have towards wife beating, still both men and women realize the importance of using contraceptives in the future.

7.4.3 Attitudes towards Wife Beating and Fertility Preference

Attitude towards wife beating was further related to family size. It was found out that in most categories women respondents with positive attitude towards wife beating were the majority, and almost the same pattern was observed to men.

This is an indication that attitude towards wife beating had nothing to do with the family size as it was anticipated respondents with positive attitude towards wife beating to have a bigger family size than those with negative attitude (Table 7.21).

Table 7.21: Attitude towards Wife Beating and Family Size (%)

	Family size					
	Women					
Level	**1-2**	**3-4**	**5-6**	**7-8**	**9-10**	**>10**
Positive	55.4	43.9	43.1	15.4	50	100
Neutral	7.6	14	8.6	11.5	12.5	-
Negative	37	42.1	48.3	73.1	37.5	-
N	**92**	**107**	**58**	**26**	**08**	**02**
	Men					
Positive	79.3	68.2	56.7	74.2	69.2	66.7
Neutral	10.9	10.6	13.3	9.7	15.4	16.7
Negative	9.8	21.2	30.0	16.1	15.4	16.7
N	**92**	**85**	**60**	**31**	**13**	**12**

7.5 Influence of Education on Contraceptive use and Family Planning

7.5.1 Educational Level

Most respondents attained some sort of formal education specifically men (89.8%) as compared to 86.0 percent of women. The same pattern was observed throughout Kishapu and Mvomero districts for both women and men. Comparing men and women generally, more women (14%) had no formal education as compared to men (10.2%) as in Table 7.22.

Obtained chi-square results for women showed that there was a highly significant association statistically between respondents education status and current contraceptive use (p=.014) and intention to use contraceptives in the future (p=.002) but not family size. Results for men also showed highly significant association statistically between respondents education status and current contraceptive use (p=.022) and intention to use contraceptives in the future (p=.023) but not family size (Table 7.22).

Table 7.22: Respondents' Education Status (%)

Responses	Women			Men		
	Total	**Kishapu**	**Mvomero**	**Total**	**Kishapu**	**Mvomero**
Yes	86.0	83.7	87.8	89.8	86.8	92.1
No	14.0	16.3	12.2	10.2	13.2	I7.9
N	**293**	**129**	**164**	**293**	**129**	**164**

Chi-square for women current contraceptive use=6.093[a] significant at p<.05
Chi-square for women intention to use contraceptives in the future=12.452[a] significant at p<.05
Chi-square for men current contraceptive use=5.264[a] significant at p<.05
Chi-square for men intention to use contraceptives in the future=7.561[a] significant at p<.05

The study went further to explore the exact levels of education respondents had attained. It was found out that women respondents from Kishapu districts (77.3%)

and Mvomero district (81.9%) had completed primary school education level. Almost the same was observed to men as 73.7% from Kishapu district and 80.8 percent from Mvomero district completed primary education (Table 7.23).

Table 7.23: Respondent's Highest Level of Education Attained (%)

Level of Education	Women			Men		
	Total	**Kishapu**	**Mvomero**	**Total**	**Kishapu**	**Mvomero**
Incomplete primary school	11.0	16.4	06.9	13.1	19.5	08.3
Complete primary school	79.9	77.3	81.9	77.7	73.7	80.8
Incomplete secondary school	06.3	03.6	08.3	01.8	01.7	01.9
Complete secondary school	02.8	02.7	02.8	06.2	03.4	08.3
Higher than secondary school	-	-	-	01.1	01.7	00.6
N	**254**	**110**	**144**	**274**	**118**	**156**

Generally, slightly more women than men (79.9% and 77.7%) completed primary school. It was further revealed that only 1.7 percent of men from Kishapu district and 0.6 percent from Mvomero district had higher education, but there were no women respondents with higher than secondary education. Majority of respondents with incomplete primary school for both men and women were from Kishapu district but generally more men as compared to women (13.1% and 11%) as shown in Table 7.23. This could be attributed to the traditional gender division of labour as one of the most important role of men in Kishapu district is to look after livestock and hence this could deny educational opportunities to some of them, while for women it could be due to early marriage so that more cows in form of dowry could be brought to the family.

7.5.3 Educational Level and Contraceptive Use

Results show that women respondents from Kishapu and Mvomero districts who were the highest contraceptive users were (57.1% and 63.2%) with at least some secondary school education. The same pattern was observed for men as 70 percent of respondents from Kishapu district and 77.8 percent of respondents from Mvomero district had at least some secondary school education (Table 7.24).

Table 7.24: Respondents' Educational Level and Contraceptive use (%)

	Current contraceptive use					
	Women			**Men**		
Education Level	**Overall**	**Kishapu**	**Mvomero**	**Overall**	**Kishapu**	**Mvomero**
No Formal Education	41	26.3	50	43.8	33.3	57.1
At least Primary Education	60.5	51.5	4	67.9	59.1	56.1
At least Secondary Education	73.1	57.1	63.2	57.1	70.0	77.8
ALL(N)	**59(173)**	**48.1(62)**	**50(82)**	**65.5(192)**	**58.1(75)**	**58.5(96)**

Chi-square for women with no formal education and current contraceptive use=6.040[a]significant at p<.05
Chi-square for men with no formal education and current contraceptive use=7.402[a]significant at p<.05
Chi-square for men with atleast primary education and current contraceptive use=4.028[a] significant at p<.05

	Intention to use contraceptives in the future					
	Overall	**Kishapu**	**Mvomero**	**Overall**	**Kishapu**	**Mvomero**
No Formal Education	65.8	38.9	76.5	68.8	66.7	71.4
At least Primary Education	78.2	71.6	68.9	79.1	70.9	69.1
At least Secondary Education	96.0	83.3	72.2	71.4	80.0	77.8
ALL(N)	**78.1(221)**	**67.2(80)**	**70.1(108)**	**77.8(228)**	**71.3(92)**	**70.1(115)**

Chi-square for women with no formal education and intention to use contraceptive=3.883[a]significant at p<.05
Chi-square for men with no formal education and intention to use contraceptive =6.542[a]significant at p<.05
Chi-square for women intention to use contraceptives in the future=16.457[a] significant at p<.05

These results were not different from those reported by Mahmud and Ringheim (1997) in a study conducted in Pakistan reported that desire for small families and a latent demand to control fertility exist particularly among the most educated and

urbanized respondents.Current contraceptive use was lower for both men and women respondents with no formal education from Kishapu districts and for Mvomero district it was the lowest among respondents with primary education.

Intention to use contraceptives in future was highest among women respondents from Kishapu district (83.3%) with secondary school education and Mvomero district (76.5%) with no formal education. The pattern was different for men respondents as Men from Kishapu district (80%) and from Mvomero district (77.8%) who intended to use contraceptives in future had secondary school education (Table 7.24).

Generally, intention to use contraceptives in the future was highest among women respondents (96%) with secondary education and 79.1 percent for men with primary education, indicating that there is no association between level of education and contraceptive use. However,a number of studies, using data from both developed and developing countries show that female education is associated with a decrease in fertility as with more education and exposure, women acquire more information about their bodies and are more able to process that information to their advantage (Sackey, 2005; Vavrus and Larsen, 2003 and Gardner, 2008).

A report by Amin (1994) as cited by Reza (2001) revealed that, although both primary and above primary education lead to increased contraceptive use and reduced fertility, the pattern of these effects is much higher among educated respondents beyond the primary level compared with those educated only at primary level and below.This was also supported by Oyodekun (2007)who emphasized that

education was positively related to more favorable attitudes toward birth control, greater knowledge of contraception and husband-wife communication. Furthermore, a woman's education was found to be a stronger predictor of method use and method choicethan that of her husband.

In another studyby Reza (2001) conducted in Bangladesh revealed that, men who have higher education are 1.9 times more likely to prefer smaller family compared to men who have no education. It was further revealed that, men who have a primary level education are also 1.7 times more likely to have smaller fertility preference compared to the men having no education. Logistic regression coefficient also showed positive relation of secondary education and men's preference for smaller families though this relationship was not statistically significant.

According to Adeyoju (2013) - in a study conducted in Nigeria, reported that in comparison to men who have no education, men with primary education were four times likely to use modern contraceptives and men who have reached secondary and higher education are eight times more likely to use modern.

The chi-square results for both women showed that there was a highly significant association statistically between respondent's education level attained and current contraceptive use (p=.014) and intention to use contraceptives in the future (p=.049) especially for those with no formal education. The results for men also showed highly significant association statistically between respondent's education level attained and current contraceptive use (p=.007 and p=.038) respectively for those with no formal education. However, for those with atleast some primary education

the association were statistically significant with current contraceptive use (p=.045) as in Table 7.24.

7.5.4 Educational Level and Family Size

Further analysis was conducted in order to understand whether there is any association between actual family size and respondents' level of education. Obtained results for women revealed that about 41 percent of respondents with no formal education had five to six children, while about 36.8 percent had three to four children and those with some secondary education (63.1%) had one to two children (Table 7.25).

This is an indication that level of education has impacts on fertility preference as number of children was found to be low with the increase in education level; however, these results were not statistically significant. According to Mahmud and Ringheim (1997) as cited by Mahmud (2005), education can influence fertility preference by changing views and life styles that are consistent with lower fertility and higher quality of children, encouraging partners' communication and favourable attitudes towards contraception.

Obtained results for women revealed that there was a significant association statistically (p=.043) between respondent's with at least some secondary education and family size (Table 7.25).

Table 7.25: Women Respondents' Education Level and Family Size (%)

Number of Children	Women								
	No formal education			Primary education			Secondary education		
	Overall	Kishapu	Mvomero	Overall	Kishapu	Mvomero	Overall	Kishapu	Mvomero
1-2	15.4	5.3	30.0	29.4	22.3	25.6	63.1	61.7	36.8
3-4	28.2	26.3	25.0	36.8	31.1	31.2	16.8	14.3	31.6
5-6	41.0	36.8	30.0	20.6	27.2	23.2	20.1	24.0	31.6
7-8	10.3	21.1	05.0	09.6	12.6	14.4	-	-	-
9-10	2.6	05.3	05.0	03.1	05.8	04.8	-	-	-
>10	2.6	05.3	05.0	0.4	01.0	-	-	-	-
N	**39**	**19**	**20**	**228**	**103**	**125**	**26**	**07**	**19**

Chi-square for women with at least secondary education and family size=25.586[a] significant at p<.05

The results for men were different from those of women as there was no specific pattern which was obtained. Respondents with no formal education (31.3%) had three to six children; with respondents from Kishapu district (33.3%) having five to six children and those from Mvomero district (33.3%) had three to four children. For those with primary education most of them (30.1%) had three to four children. Whilst respondents from Kishapu (28.2%) had the same number of children (3-4), their fellow respondents from Mvomero had three to six children (24.8%). This means that with the same level of education, most respondents from Kishapu district had fewer children while Mvomero district respondents had up to six children. For those with secondary education, a good number (53.6%) had 1 to 2 children and most of them were from Kishapu (50%) and only (15.4%) from Mvomero districts (Table 7.26). These findings were not statistically significant, denoting that there was no

any direct relationship between respondent education level and family size. This could be due to the poor distribution of respondents in different education level as the majority had at least some primary education.These variations indicate that there is no direct association between level of education for men respondents and fertility preference.

All secondary and tertiary education has a significant inverse relationship with fertility preferenceas education make women more aware of methods of birth control, and more accepting of alternative lifestyles that do not necessarily include marrying early and having children (Leon, 2004).

Table 7.26: Men Respondents' Education Level and Family Size (%)

Number of Children	Men								
	No Formal Education			At least Primary Education			At least Secondary Education		
	Overall	Kishapu	Mvomero	Overall	Kishapu	Mvomero	Overall	Kishapu	Mvomero
1-2	18.8	22.2	33.3	29.7	17.3	20.4	53.6	50.0	15.4
3-4	31.3	11.1	33.3	30.1	28.2	24.8	17.9	-	23.1
5-6	31.3	33.3	-	20.1	21.8	24.8	17.9	40.0	23.1
7-8	12.5	22.2	-	10.8	13.6	14.2	7.1	10.0	15.4
9-10	6.3	11.1	33.3	4.4	9.1	6.2	3.6	-	23.1
>10	-	-	-	4.8	10.0	9.7	-	-	-
N	**16**	**9**	**3**	**249**	**110**	**113**	**28**	**10**	**13**

Chi-square for men with atleast secondary education and family size=11.233[a] significant at p<.05

In agreement with other studies (Mahmud and Ringheim, 1997) as cited by Mahmud (2005), their study also confirms that education has a significant influence on the fertility preference of Bangladesh men. The difference is more obvious between men who have no education and men who are highly educated. Even a few years of schooling (primary level education) creates a significant difference in men's fertility

preference. In a study conducted by John (2012) in Kahama Tanzania revealed that the use of contraceptives increased with level of education. These findings are consistent with other studies in Tanzania by Kessy and Rwabudongo (2006), India by Daset al. (2001) and Ethiopia by Gizaw and Regassa (2011), which showed strong association between education level and contraceptive use.

This is also supported by the findings of TDHS 2010 where only 22% of women with no education were using modern methods of contraception as compared to 52% of women with at least some secondary education. With formal education it is easier to make informed choices because of wide understanding of issues, including health as compared with ones without formal education.Chi square results for men indicated that there was a significant association statistically (p=.047) between respondent's with at least some secondary education and family size (Table 7.26).

7.6 Influence of Employment on Contraceptive Use and Family Size

7.6.1 Couples Employment Status

The results revealed that women respondents from Kishapu district (55.1%) and 74.4 percent from Mvomero district rely on agriculture as their main source of income. Casual business was the second source of income for women in Kishapu district (20.2 %) and 19.5 percent from Mvomero district.

Men respondents from Kishapu (93.8%) and from Mvomero district (84.1%) was also mentioned agriculture as their main source of income followed by casual labour for Kishapu district (4.7%) and Mvomero district (11.6%). Generally, results show that the majority of women and men respondents from Kishapu and Mvomero rely

on agriculture (Table 7.27). This is no surprise as most of the respondents were located in the rural and peri-urban areas and therefore not employed and not well educated (Table 7.27).

Table 7.27: Respondent's Main Source of Income (%)

Main source of income	Women			Men		
	Overall	Kishapu	Mvomero	Overall	Kishapu	Mvomero
Agriculture	65.9	55.1	74.4	88.4	93.8	84.1
Casual business	19.8	20.2	19.5	-	-	-
Casual labour	00.3	00.8	-	8.5	04.7	11.6
Employed	00.3	00.8	-	03.1	01.6	04.3
Housewife	13.7	23.3	6.1	-	-	-
N	**293**	**129**	**164**	**293**	**129**	**164**

According to TDHS (2010) residence has a close association with the type of occupation. The majority of rural women and men are engaged in agriculture, while urban dwellers are mostly found in skilled and unskilled occupations.Employment is one of the important factors, which determine contraceptive use. Employment can also be a source of empowerment for both women and men. It may be particularly empowering for women if it puts them in control of income.Women with gainful occupation are more likely to use contraception than those with no gainful occupation (DHS, 2010).

7.6.2 Couples Employment Status and Contraceptive Use

Current contraceptive use was found to be highest among women respondents from Kishapu (100%) who were employed and for Mvomero district were those dealing

with agriculture (52.1%). With regard to men, 66.7 percent of respondent from Kishapu district who were current contraceptive users were casual laborers while for Mvomero district they were employed (85.7%). Generally, all women respondents who were employed were using contraceptives followed by those who were doing causal business (69%), while employed men (88.9%) and causal labourers (80%) were using contraceptives. On the other hand, the lowest contraceptive users were housewives (45%) and men who were engaged in agriculture (63.4%) as in Table 7.28.

These results were statistically significant at 5% significant level signifying that there is association between contraceptive use and the type of occupation, as couples who were engaged in agriculture were less likely to use contraceptives than those engaged in other occupations.

This finding concur with that of Odhiamho (1997) cited by Reza (2001) in his study in Kenya where he found that there was a large positive direct effect of husbands' occupations on couple's current use of contraception and, husbands in higher status occupations are more likely to use contraception than the husbands employed in lower status occupations.

Similarly a study done in Bangladesh showed that wives of husbands who are employed in sales or services are 1.5 times more likely to use contraceptives than the wives of agricultural labors or farmers (Islam *et al.*, 1995) as cited by Rahman and Kabir (2005).

Table 7.28: Respondents Employment Status by Contraceptive Use (%)

Employment status	Current contraceptive use					
	Women			Men		
	Overall	Kishapu	Mvomero	Overall	Kishapu	Mvomero
Agriculture	60	44.9	52.1	63.4	57.9	58.8
Casual labour	-	-	-	80	66.7	42.1
Casual business	69	65.4	46.9	-	-	-
Employed	100	100	-	88.9	50.0	85.7
Housewife	45	43.3	50	-	-	-
ALL(N)	**59(173)**	**48.1(62)**	**50(82)**	**65.5(192)**	**58.1(75)**	**58.5(96)**

Chi-square for women who are housewives and current contraceptive use=4.520[a] significant at p<.05

Chi-square for men who are employed in agriculture and current contraceptive use=4.820[a] significant at p<.05

	Intention to use contraceptives in the future					
	Overall	Kishapu	Mvomero	Overall	Kishapu	Mvomero
Agriculture	77.8	63.9	69.6	77	71.9	72.8
Casual labour	-	-	-	84	66.7	52.6
Casual business	87.7	84	67.7	-	-	-
Employed	100	100	-	77.8	50	57.1
Housewife	69.2	62.1	88.9	-	-	-
ALL(N)	**78.1(221)**	**67.2(80)**	**70.1(108)**	**77.8(228)**	**71.3(92)**	**70.1(115)**

Chi-square for women who are employed and intention to use contraceptives =3.867[a] significant at p<.05

Chi-square for men who are employed and intention to use contraceptives =5.848[a] significant at p<.05

One of the explanations of how occupation influences fertility behavior may be because, husband's occupation is related to the economic status of the family that provides them exposure to modern objects and ideas and influences their fertility related behavior (Khalifa *et al.,* 1998).Intention to use contraceptives in the future was found to be highest among all women respondents from Kishapu district who were employed (100%) and house wives (88.9%) for Mvomero district as in Table 7.28. The pattern was different for men as the highest intention to use contraceptives among Kishapu district respondents (71.9%) and Mvomero district (72.8%) was

among those respondents dealing with agriculture. Generally, the intention to use contraceptives was high among women respondents who were employed (100%) and those who were casual laborers' (87.7%), while for men was among casual laborers' (84%) and employed (77.8%). The observed pattern showed specific pattern suggests association between respondent's employment status and contraceptive status.

Statistically, chi-square results for women indicated that there is significant association between being housewife and current contraceptive use (p=.034) and being employed and intention to use contraceptives in the future (p=.049). Furthermore, results for men showed statistical significance between being employed in agriculture and current contraceptive use (p=.028) and being employed and intention to use contraceptives in the future (p=.054) as in Table 7.28.

7.6.3 Couples Employment Status by Family Size

Obtained results showed that about 29 percent of women respondents from Kishapu district who were dealing with agriculture had up to six children. In Kishapu 23.1 percent had up to eight children and Mvomero (34.4%) had up to four children. Most of the respondents who were house wives (40% each district) from Kishapu and Mvomero had up to four children. Only one respondent from Kishapu district was employed and she had two children. For men respondents who were dealing with agriculture, about 24.8 percent from Kishapu and 25 percent from Mvomero had up to four children but nearly the same number (23.1%) from Kishapu and and 24.3 percent from Mvomero district had up to six children. Causal labourers from Kishapu district (50%) had up to six children while those from Mvomero (31.6%) had up to four children (Table 7.29).

These findings were statistically significant at 5% indicating female respondents engaged in casual business and those who are employed are more likely to have a small family size as compared to the rest. This could be associated with the level of education and exposure these women have as they have to interact with new different people and hence a chance of getting new ideas about life in general.These results suggest that there was no apparent association between ones occupation and the number of children they have.

Table 7.29: Respondents Type of Occupation and Family Size (%)

Number of Children	Type of occupation-Women							
	Agriculture		Casual business		Employed		Housewife	
	Kishapu	Mvomero	Kishapu	Mvomero	Kishapu	Mvomero	Kishapu	Mvomero
1-2	26.1	25.2	19.2	31.3	100	-	20.0	30.0
3-4	29.0	28.6	23.1	34.4	-	-	40.0	40.0
5-6	29.0	27.7	23.1	12.5	-	-	23.3	30.0
7-8	08.7	12.6	23.1	15.6	-	-	13.3	-
9-10	07.2	4.2	7.7	6.3	-	-	-	-
>10	-	1.7	3.8	-	-	-	3.3	-
N	**69**	**58**	**26**	**32**	**01**	**-**	**30**	**10**
Number of Children	**Type of occupation-Men**							
	Agriculture		**Casual labour**		**Employed**		**Men working at home**	
	Kishapu	**Mvomero**	**Kishapu**	**Mvomero**	**Kishapu**	**Mvomero**	**Kishapu**	**Mvomero**
1-2	19.8	25.7	16.7	5.3	50.0	14.3	-	-
3-4	24.8	25.0	16.7	31.6	50.0	14.3	-	-
5-6	23.1	24.3	50.0	26.3	-	28.6	-	-
7-8	14.9	11.8	-	21.1	-	14.3	-	-
9-10	9.1	5.9	-	10.5	-	28.6	-	-
>10	8.3	7.4	16.7	5.3	-	-	-	-
N	**121**	**136**	**06**	**19**	**02**	**07**	**-**	**-**

Chi-square for men who are employed in agriculture and family size=13.793[a] significant at p<.05

Some respondents had more than ten children but there was no specific pattern observed when compared with one's occupation. This could be due to poor

distribution of respondents in different categories of work.This was in agreement with study done on the Yoruba ofNigeria by Bankole*et al.,* (1995) who revealed that desired fertility is lower for women married to husbandsemployed outside agriculture, compared with those in the agricultural sector.

It was further supported by Bankole, 1995 and Amin *et al.,* (1993) who believe that people involved in agricultural works want more children compared to those involved in other occupations.Chi-square results for men showed that there was highly statistical significance between men who are employed in agriculture sector and family size (p=.017) as compared to the rest as in Table 7.29.

7.6.4 Logistic Regression Results

A binary logistic regression was performed to ascertain the effect of type of employment on the likelihood that participants will use contraceptives. Logistic regression model was statistically significant, indicating that the predictors distinguished contraceptive users and non users (chi-square 7.974). The model explained 3.7% (Nagelkerke R^2) of the variance in current contraceptive use and correctly classified 66.2% of cases with 0.043 significance level. Regression coefficient was negative for men employed in Agriculture with odd ratio 0.063 times less likely to use contraceptives as compared to the rest, therefore accepting the alternative hypothesis (Appendix VIIe).

7.7 Chapter Summary

Couples reported to be making decisions together regarding various issues in the household - mostly on the use of earned money by respondent and that owned by spouse, decision on health care, respondent and spouse contraceptive use, major household purchase and respondents visit to friends and relatives (except for women respondents from Kishapu district who reported their husband as sole decision maker regarding visit to friends and relatives). Most of these items were found not to have direct link with family size.

It was observed that more men owned houses and land compared to women, though the number of women respondents reporting joint ownership of properties was higher as compared to men. There was no obvious link between ownership of property and contraceptive use accept for the intention to use contraceptive in the future where men and women who reported to own land showed highest intention to use contraceptives in the future. Couples attitude towards wife beating was found to be high among Mvomero district couple than Kishapu, and it was found to have no link between wife beating and contraceptive use as well as family size.

Most couples had some sort of formal education with the majority-completed primary school and very few couples had secondary education. The highest contraceptive users had at least some secondary education and it was lowest to respondents with no formal education. Intention to use contraceptives in the future was higher among respondents with at least some secondary education ecxepts for respondents from Mvomero district who had no formal education. It was noted that education level had effect on family size especially for women as respondents with

no formal education had large family size than the rest but that was not the case for men.

Agriculture was the main source of income for all couples followed by casual business for women and casual labour for men. Large family size was noted among women respondents engaged in Agriculture and casual business more in Kishapu district than Mvomero district, while for men were those in agriculture and casual labour. Employed women from Kishapu and those who were dealing with agriculture from Mvomero district were using contraceptives, while casual labourers from Kishapu district and those dealing with agriculture from Mvomero district were using contraceptives. Intention to use contraceptives in the future was found to be high among employed women from Kishapu district and housewives from Mvomero district, while for men were those in agriculture sector.

CHAPTER EIGHT

THE INFLUENCE OF CULTURE ON COUPLES' DECISION ON FERTILITY PREFERENCE

8.1 Chapter Overview

This chapter discusses whether there is an existence of patriarchal practices in the study areas, and its extent. The level of patriarchy was further related to contraceptive use and family size. The respondent's religion affiliation will be presented as well as its association with contraceptive use and family size. The respondent's religiousity level and their awareness on the stand of their religion on family planning and the link between respondent's level of religiousity and contraceptive use and family size will be presented as well. This will be followed by respondent's ethnicity and its association with contraceptive use and family size.

8.2 Levels of Patriachy

Results showed that women respondents from Kishapu district reported high levels of patriarchy in six items and Mvomero in five items out of eight indicating the existence of patriarch in the study areas.

It was revealed from Kishapu and Mvomero districts that there were customary laws of inheritance of widow (61.2%), divorce is common in the community (93% and 87.8%); it is common for divorced woman to re-marry (96.9% and 97%) and that it is common for a divorced woman to have children outside the wedlock (83.7% and 89%). It was also reported that inheritance of property is through fathers lineage (82.2% and 50.6%) and children naming is through father's lineage as well (98.4%

and 90.9%). A good number of respondents from Kishapu district also reported that there are believes related to fertility and child bearing in terms of sex and number of children (45%) and that there are preference for a particular sex of children in the community (45%), Table 8.1.

A small proportion of respondents from Mvomero district reported customary law of inheritance of widows (14%), believes related to fertility and child bearing in terms of sex and number of children (14%) and that divorce is common in the community (14%). These results connote that there is high level of patriarchy in the study areas especially in Kishapu as compared to Mvomero (Table 8.1).

Table 8.1: Respondents Responses on Patriarchal Existence (%)

Variables	Women			Men		
	Total	Kishapu	Mvomero	Total	Kishapu	Mvomero
There is customary law of inheritance of widows	34.8	61.2	14.0	17.4	29.5	07.9
There are believes related to fertility/child bearing in terms of sex and number of children	27.6	45.0	14.0	16.7	27.1	08.5
There is preference for a particular sex of children in the community	27.6	45.0	14.0	18.8	31.0	09.1
Divorce is common in the community	90.1	93.0	87.8	80.2	89.9	72.6
It is common for a divorced woman to remarry and continue child bearing	96.9	96.9	97.0	94.9	98.4	92.1
It is common for a divorced woman to have children outside the wedlock	86.7	83.7	89.0	92.2	99.2	86.6
Properties are inherited through the farthers line	64.5	82.2	50.6	62.8	53.5	70.1
Children are given names through farthers line	94.2	98.4	90.9	96.2	97.7	95.1

The results for men showed that respondents from both Kishapu and Mvomero districts reported existence of patriarchy in five out of eight items. The majority of respondents from Kishapu and Mvomero districts reported that divorce is common in the community (89.9% and 72.6%), it is common for divorced woman to re-marry (98.4 and 92.1%) and it is common for a divorced woman to have children outside the wedlock (99.2% and 86.6%). It was further noted that inheritance of property is through fathers line (53.5% and 70.1%) as well as child naming is through furthers line (97.7% and 95.1%) as in Table 8.1.

Nearly a quarter of respondents from Kishapu reported existence of customary law of inheritance of widow, believes related to fertility and child bearing in terms of sex and number of children and that divorce is common in the community as compared to respondents from Mvomero district (Table 8.1).

These results signify high levels of patriarch in the two study areas as for women.Various respondents commented on customary law of inheritance of widows as observed in the following comments:

> *"It was common in the past especially if the husband was wealth with many farms and livestock so that they will not disappear and belong to someone else as well as for the widow to get support of taking care of the children. The brother in law will stay with his brother's wife and they will even bear children. Now days we have stopped widow inheritance due to diseases and people found that it is not good for relatives to share one woman, they find it an ethical (Mvomero woman aged 46yrs)".*

Another respondent reported that the practice was more in the past but it has gone down especially due to HIV/AIDS;

> *"Widow inheritance was practiced in the past but it has gone down now as people fear of diseases like HIV/AIDS and the woman who does not want to be inherited, she can choose a very young boy among relatives just as a symbol. This is common to pagan and traditional religion believers (Kishapu woman aged 41years).*

There were different opinions from respondents as commented by this respondent:

> *"Widow inheritance exist even now for some people, as some brother in law have a habit of having sexual relationship with their brothers wives, so if it happens that the brother pass away the other brother take over and make it official (wanahalalisha)-(Kishapu woman aged 37years)".*

Another respondent insisted that:

> *"Apart from widow inheritance, if the woman was found to be infertile, she can ask her husband to marry her young sister especially if the husband is rich so that those two women can inherit the wealth once the husband passes away. This is done so for the fear of not getting anything once a husband pass away and the wife is childless (Mvomero men respondent aged 54yrs)".*

The respondents aired their views on the issue of divorce in their communities and several comments were observed:

> *"Divorce is very common and now day's women ask for divorce (divorce paper) before leaving so that they can be free to get married. If she will not*

do that, once she start having sexual affairs with another me, the former husband can arrange to catch them committing adultery (kuwashika ugoni) and if he succeeds he will be paid 5 live cows or a 500,000 cash, even if they have been separated for 3years, butif the marriage was in church what normally occurs is separation though the other person can go and live with another man but without paying a dowry (Kishapu woman aged 34years).

Another respondent from Mvomero insisted that:

"Divorce is very common to Luguru people and usually any one can give divorce (could be a husband or a wife) but the one who is giving the other person divorce is the one supposed to leave depending on where they live. If woman's place then husband will have to leave, but if they bought a place of their own and the wife is the one giving divorce then the wife will have to leave and she can live with another person and bear children without problem, but they will not be allowed to get married for the second time (Mvomero man aged 56years)."

8.2.1 Index of Patriarchy

The index of patriarchy was prepared to obtain a summary measure. The index was based on six variables. For each variable every "Yes" response was given a value of 1, which indicates high level of patriarchy while "No" response was given a value of 0 meaning low level of patriarchy. The index was prepared and it ranged from 1 to 7. The values of the index were further categorized into Low, Medium and High levels of patriarchy. Scores of 1 to 3 were considered low, 4 medium and 5 to 7 High.

The results showed that 66.7 percent of women respondents from Kishapu district reported high levels of patriarch while 56.7 percent from Mvomero district believed that the level of patriarchy is neutral. Men respondents from Kishapu district (45%) reported neutral levels of patriarch as well as 57.3 percent of respondents from Mvomero district reported the same. Generally, 43 percent of women respondents reported high levels of patriarch while 43.7 percent of men respondents reported neutral levels of patriarch. Lowest patriarch levels were found among women and men respondents from Kishapu (10.1% and 16.3%) as in Table 8.2. This means there is high level of patriarch in Kishapu and Mvomero districts.

Table 8.2: Level of Patriarchy (%)

	Women			**Men**		
Level	**Total**	**Kishapu**	**Mvomero**	**Total**	**Kishapu**	**Mvomero**
Low	15	10.1	18.9	35.5	16.3	37.2
Neutral	42	23.3	56.7	43.7	45	57.3
High	43	66.7	24.4	20.8	38.7	**5.5**
N	**293**	**129**	**164**	**293**	**129**	**164**

8.2.2 Level of Patriarchy and Contraceptive Use

The results showed that, women respondents from Kishapu with neutral level of patriarch (50%) and 61.3 percent of respondents from Mvomero district who reported low levels of patriarch were the highest contraceptive users, whilst men respondents from Kishapu and Mvomero districts (66% and 66.7%) whoreported high levels of patriarch were the highest current contraceptive users. Generally, the majority of women respondents who reported low levels of patriarchy (68.2%) were current users of contraceptives and for men as 68.9 percent who reported high levels of patriarchy were the majority of current contraceptive users (Table 8.3).

Lowest contraceptive use was found to be among women respondents from Mvomero (35%) who reported high levels of patriarchy while for men was from Kishapu 51.7 percent who reported neutral level of patriarchy. Generally, women respondents who reported low levels of contraceptives (68.2%) and men who reported high levels of contraceptives (68.9%) were those who reported high levels of patriarch (Table 8.3).

Table 8.3: Respondents Level of Patriarchy and Contraceptive use (%)

Level	**Current Contraceptive Use**					
	Women			**Men**		
	Total	**Kishapu**	**Mvomero**	**Total**	**Kishapu**	**Mvomero**
Low	68.2	46.2	61.3	67.3	57.1	56.9
Neutral	61.0	50.0	52.7	62.5	51.7	60.6
High	54.0	47.7	35	68.9	66.0	66.7
ALL(N)	**59.0(144)**	**48.1(62)**	**50.0(82)**	**65.5(192)**	**58.1(75)**	**58.5(96)**
Level	**Intention to use contraceptives in the future**					
	Total	**Kishapu**	**Mvomero**	**Total**	**Kishapu**	**Mvomero**
Low	86.4	69.2	70	83.2	81.0	70.7
Neutral	83.5	75	74.7	75.0	63.8	70.2
High	69.5	64.1	59.5	75.4	76.0	66.7
ALL(N)	**78.1(188)**	**67.2(80)**	**70.1(108)**	**77.8(228)**	**71.3(92)**	**70.1(115)**

Obtained results signify that there is a link between the level of patriarchy and contraceptive use. The contraceptive use pattern for women indicate that it is somehow linked with the level of patriarch as women who reported low to neutral

levels of patriarchy were the majority of contraceptive users while men who reported high levels of patriarchy were contraceptive users indicating that they are decision makers on family planning issues, and women who reported low levels of patriarch means they are involved in decision making regarding contraceptive use and that is why they are the majority of contraceptive users.

Regassa (2006), in a study conducted in Ethiopia, reported that the persistence of high natural fertility is deeply rooted in the patriarchal system with its emphasis on family and descendants. Patriarchy is deeply entrenched in most of Ethiopian's social institutions, giving husbands absolute decision making power, and forcing wives to subordinate their interests to their husbands and such a system of family life undoubtedly has great deal of repercussion on the prospects of fertility decline in the region. For example, in most instances, higher age difference between wife and husband diminishes the likelihood of communication and discussion on common reproductive issues, in which case the husband/patriarch may dominate the wishes of the wife. In this context, even if a woman feels like using family planning or stop child bearing, she may not initiate the process without her husband's consent.

According to Schuler *et al.* (2009) in a study conducted in Tanzania, reported that women rarely initiate contraceptive use on their own, without the husband's consent. Most of the female respondents were worried that if they would use any type of family planning method, then their marriage would be in trouble. However, the consequences for women using family planning methods secretly were described as very severe. Both men and women, users and nonusers, said that if a woman was caught using contraceptives secretly a husband would warn, beat, or divorce her.

Most believed that a decision like that should not be made without involving the husband, and that if the husband refused, his decision should be obeyed. Sexual jealousy also discouraged contraceptive use, and the threat of conflict and violence discouraged women who wanted to space or limit their pregnancies from taking a stronger stand.

The intention to use contraceptives in the future was found to be high among women respondents from Kishapu and Mvomero districts (75% and 74.7%) who reported neutral patriarch levels. Men with highest intention to use contraceptives in the future were those from Kishapu and Mvomero district (81% and 70.7%) who reported low levels of patriarchy. Generally, majority of women and men who reported low levels of patriarch (86.4% and 83.2%) had the highest intention to use contraceptives in the future. Lowest intention to use contraceptives in the future were found among Mvomero women (59.5 %) and Kishapu men (63.8%) who reported neutral level of patriarch (Table 8.3). These results indicate that, for these respondents, their intention to use contraceptives is not determined greatly by the level of patriarch but rather low education level among other things which is associated with preference to large family size.

Northern Ghanais highly patriarchal and men - who are heads of compounds of 10 to 15 people, are clearly gatekeepers for the introduction of information and new behaviours and so as family planning use. In male dominated societies like the Yoruba, women are not supposed to take independent decisions on reproductive issues (Casterline, 1997; Feyisetan, 2000; Oyediran and Isiugo-Abanihe, 2002). It was further emphasized that, targeting men for contraceptive education, in general, is

a good way to increase male approval of contraception as a woman supported by a social network of friends still may not use a contraceptive method if her husband does not approve.In Africa, husbands influence and exercise power in childbearing decisions in a major way (Best, 1999; Kodzi, 2009).

8.2.3 Level of Patriarchy and Family Size

Women respondents who reported high levels of patriarchy had more children as compared to those who reported low levels with the exception of those with one to two children who reported neutral level of patriarchy. The majority of men respondents with more than four children were those who reported medium levels of patriarch with the exception of 37.6 percent of respondents who reported low levels of patriarch who had up to two children and 39.3 percent who reported high levels of patriarch (Table 8.4). These results signify that there is an association between level of patriarch and the number of children especially for women. It is expected that where patriarch levels is high the number of children is also expected to be high due to low autonomy of women on various issues including family planning decisions, though the case is not the same to men. This can also be associated with large spouse age gap which was found between spouses.

According to Ogunjuyigbe, Ojofeitimi, and Liasu, (2009), in most African societies, males have upper hand in deciding how many children to have as more children further enhance his status as a man in society. They further noted that, male dominance is particularly profound in matters of reproduction and they generally view reproduction as their prerogative, an issue in which the compliance of their wives is taken for granted.

Table 8.4: Respondents level of Patriarchy and Family Size (%)

	Women					
Level	**1-2**	**3-4**	**5-6**	**7-8**	**9-10**	**>10**
Low	17.4	13.1	19.0	7.7	12.5	-
Medium	48.9	42.1	37.9	26.9	37.5	50.0
High	33.7	44.9	43.1	65.4	50.0	50.0
N	**92**	**107**	**58**	**26**	**08**	**02**
	Men					
Low	37.6	30.7	19.8	8.9	1.0	2.0
Medium	30.5	23.4	21.1	12.5	7.0	5.0
High	23.0	39.3	19.7	8.2	4.9	4.9
N	**92**	**85**	**60**	**31**	**13**	**12**

8.3 Religion Influence on Contraceptive and Family Size

8.3.1 Respondents Religion Affiliation

The results showed that women respondents from Kishapu district belonging to traditional religion were the majority (33.3%), followed by Protestants (32.6%) and Catholics (25.6%). The majority of women respondents from Mvomero were Catholics (50%) followed by Moslems (37.2%). Like women, men respondents from Kishapu district who belonged to traditional religion were the majority (38%), followed by Protestants (28.7%) and Catholics (20.2%). The majority of men respondents from Mvomero were Catholics (47%), followed by Moslems (42.1%) and Protestants (10.4%). Generally, the majority of women (39.2%) and men (35.2%) respondents were Catholics, followed by Muslims (21.5% and 24.9%), Protestants (18.8% and 18.4%) and traditional religion (15.4% and 16.7%) as in Table 8.5.

Table 8.5: Respondent's Religion Affiliation (%)

Religion	Women			Men		
	Total	**Kishapu**	**Mvomero**	**Total**	**Kishapu**	**Mvomero**
Moslem	21.5	01.6	37.2	24.9	03.1	42.1
Catholic	39.2	25.6	50.0	35.2	20.2	47.0
Protestant	18.8	32.6	07.9	18.4	28.7	10.4
EAGT	03.1	02.3	03.7	04.8	10.1	00.6
Tradition	15.4	33.3	01.2	16.7	38.0	-
Sabbath	02.0	04.7	-	-	-	-
N	**293**	**129**	**164**	**293**	**129**	**164)**

8.3.2 Religion Affiliation and Contraceptive Use

Further analysis was conducted to get more information on the relationship between religion and contraceptive use. The results revealed that the majority of women respondents from Kishapu who are current contraceptive users are Sabbath (83.3%) followed by Catholics (60.6%). For those from Mvomero, majority were EAGT (66.7%), followed by Moslem (57.4%). Men respondents from Kishapu who were the majority of current contraceptive users were Moslems (75%), followed by Catholics (73.1%) and from Mvomero were Moslems (63.8%) followed by Catholics (57.1%). Lowest contraceptive users were both women and men from Kishapu and Mvomero districts who are traditional believers.

Generally, the highest contraceptive users among women are Sabbath women (83.3%) followed by Catholics (68.7%) and Moslems (63.5%) while for men the majorities were Catholics (73.8%) followed by EAGT (71.4%) and Moslems (69.9%) as in Table 8.9. These findings are different from that reported by Isiugo *et*

al., 1994; Agadjanian, 2005, in a study conducted in Nigeria that in some societies, Catholicsm is one of the determining factors influencing non-use of family planning; some predominantly Catholic societies had lower levels of fertility. He found out that, being a Catholic or protestant was related to lower family size and large family size is related to being a Muslim or traditional religion.It is therefore, the adoption of contraception seems to be a cultural process that depends on access to contraceptives and acceptability of information and this is related to one's faith or community faith.

There were different opinions from religious leaders regarding the use of family planning which by one way or another could have influenced the use or none use of family planning depending on the religiousity level as reported by the following religious leaders:

> *"Islam accepts the natural family planning only, and that is according to Qur'an (breast feding, withdrawal and calendar methods only). The modern contraceptive methods like pills and injections takes away the life, and this is against the teaching of prophet s.a.s, who taught us to marry and give birth to many children so that he can be pleased (by the number of his people) in the last day –qiama (Islamic leader-Kishapu).*

Though another religious leader reported that his church support only the use of natural family planning:

> *"The Catholic Church believes that artificial contraception is sinful and immoral and may frustrate a divine plan to bring a new life into the world but instead Catholics can use natural family planning. The church believe most modern contraceptives aren't true contraceptives; they don't prevent the*

sperm and egg from conceiving but rather abort fertilized eggs (embryo and a human person) as life begins at contraception. Conception don't have to occur each time, but no man made barriers should prevent what God may intend to happen (Catholic leader-Mvomero)"

Protestants leader's views on family planning were different from Muslims and Catholics as reported by one of the leaders:

"The church believe that the use of birth control as a means of regulating the number of children a couple has and as a means to space out the ages of the children, is a moral decision that is left up to each couple to decide in order to make sure that they are in a position to take care of their children by providing all their needs so that they can grow to be responsible citizens (Lutheran Church leader-Mvomero)"

Women from Kishapu district with the highest intention to use contraceptives in the future were among Moslems and EAGT (100%) though this could be due to the small numbers or respondents in these two groups. They were followed by Catholics (86.7%) and for women from Mvomero the highest intention was found among EAGT (83.3%) followed by Protestants (80%).

Men respondents from Kishapu district with high intention to use contraceptives were found among Catholics (80.8%) followed by Protestants (75.7%) and Moslems (75%) while their counterparts from Mvomero the highest intention to use contraceptive was found among Moslem (63.8%) and Catholics (57.1%). In general the intention to use contraceptives in the future was high among Moslem women

(88.7%) and lowest among traditional believers (46.3%). For men respondents, the intention to use contraceptives in future was high among Moslems (87.7%) and the lowest among EAGT (64.3%) as in Table 8.6.

Table 8.6: Respondents Religion by Contraceptive Use (%)

Categories	Current Contraceptive Use					
	Women			Men		
	Total	**Kishapu**	**Mvomero**	**Total**	**Kishapu**	**Mvomero**
Moslem	63.5	50.0	57.4	69.9	75.0	63.8
Catholic	68.7	60.6	45.1	73.8	73.1	57.1
Protestant	54.5	52.4	46.2	63.0	62.2	47.1
EAGT	44.4	33.3	66.7	71.4	69.2	-
Tradition	33.3	30.2	-	42.9	42.9	-
Sabbath	83.3	83.3	-	-	-	-
ALL(N)	**59(173)**	**48.1(62)**	**50(82)**	**65.5(192)**	**58.1 (75)**	**58.5(96)**

Chi-square for women current contraceptive use=19.964[a] significant at p<.05

Chi-square for men current contraceptive use=15.239[a] significant at p<.05

Categories	Intention to use					
	Total	**Kishapu**	**Mvomero**	**Total**	**Kishapu**	**Mvomero**
Moslem	88.7	100.0	70.7	87.7	75.0	71.0
Catholic	84.8	86.7	68.4	76.7	80.8	70.1
Protestant	74.1	70.7	80.0	81.5	75.7	70.6
EAGT	87.5	100.0	83.3	64.3	61.5	-
Tradition	46.3	43.6	-	65.3	65.3	-
Sabbath	83.3	83.3	-	-	-	-
ALL(N)	**78.1(221)**	**67.2(80)**	**70.1(108)**	**77.8(228)**	**71.3(92)**	**70.1(115)**

Chi-square for women intention to use contraceptives in the future=44.747[a] significant at p<.05

Chi-square for men intention to use contraceptives in the future=18.236[a] significant at p<.05

These findings are in agreement with those of Karim (2005) in a study conducted in Pakistan. Even in Pakistan things have begun to change as most of its clerics now offer family planning information at mosques, and agree that Muslim texts support contraception. However, Blackwell, (2008) reported that, in Afghanistan and

Pakistan's tribal areas, Taliban insurgent has taken to killing healthcare workers involved in family planning. Threats, kidnappings and assassinations have brought family planning down in disputed areas.

For example after murdering a female healthcare worker in Kandahar, Taliban insurgents wrote to her employer. *"We took up arms against the infidels in order to bring Islamic law to this land,"* they crowed in a letter bearing the seal of the Taliban military council. *"But you people are supporting our enemies, the enemies of Islam and Muslims...Personnel were trained to distribute family planning pills. The aim of this project is to persuade the young girls to commit adultery.*" (Blackwell 2008).

The results for both women and men were statistically significant (p=.001 and p=.004) respectively, indicating that there is great association between respondents religion affiliation and current contraceptive use. The results also showed great association statistically between respondents religion affiliation and the intention to use contraceptives in the future with p=.000 (women) and p=.020 (men) as shown in Table 8.6.

8.3.3 Religion Affiliation and Family Size

Women respondents with up to six children were Catholics followed by traditional believers who had more than seven children followed by Protestants. Most respondents reported to have more than five children except EAGT who had only up to four children (Table 8.7). These results were different from those reported by Reza (2001) in Bangladesh which revealed that there was a highly significant effect of

religion on fertility intention of men in Bangladesh, which is consistent with other studies done in many other developing countries.

Table 8.7: Respondents Religion and Family Size (%)

Religion	**Women**					
	1-2	**3-4**	**5-6**	**7-8**	**9-10**	**>10**
Moslem	29.3	22.4	15.5	11.5	-	-
Catholic	40.2	43.0	41.4	26.9	12.5	-
Protestant	13.0	22.4	17.2	23.1	25.0	50.0
EAGT	06.5	02.8	-	-	-	-
Tradition	09.8	07.5	22.4	34.6	62.5	50.0
Sabbath	01.1	01.9	03.4	3.8	-	-
N	92	107	58	26	08	02
Chi-square for women family size=50.185[a] significant at p<.05						
Religion	**Men**					
Moslem	33.7	24.7	25.0	19.4	-	-
Catholic	37.0	47.1	28.3	22.6	23.1	16.7
Protestant	19.6	15.3	20.0	12.9	15.4	41.7
Tradition	08.7	10.6	16.7	32.3	61.5	33.3
Pentekoste	01.1	02.4	10.0	12.9	-	08.3
N	**92**	**85**	**60**	**31**	**13**	**12**
Chi-square for men family size=61.400[a] significant at p<.05						

In Bangladesh Muslims are more likely to prefer a larger family size compared to non-Muslims and the reasons behind this is related to low literacy which was found as the basis of misinterpretation of religious belief. It was further revealed in a studyon belief that “Islamic teaching encourages large families’ was found to be very

high among illiterate respondents (almost 83 percent) compared to educated men (17%). These findings imply that religious conservativeness may be related to educational attainment and in Africa the religious and traditional belief systems are primarily anti-family planning, the use of contraceptives in traditional African societies tends to be de-emphasized (Khalifa, 1998; Abdulla, 2014).

Kaufmann (2009) reported that Iran - which is one of the Muslim societies that have embraced family planning in the 1960s and 70s, its fertility began to decline due to introduction of westernization policy focused on getting women outside the home into education and work, and making contraception widely available and as a result. However, this did not last long becauseof the Iranian Revolution of 1979, codified Islamic dress into law, re-segregated the sexes and sought to push Iranian women back into the home and family planning clinics were derided as an imperialist plot against Islam and closed. Moreover, the age of marriage was lowered to 9, and the role of women as mothers lauded. As a result, unsurprisingly, fertility rates returned to traditional high levels of around 6 children per woman. Indicating that religion alone was not the cause of fertility change in Iran.

The same pattern was observed to men as most Catholics were the majority with up to six children while Traditional believers were the majority with seven to nine children and Protestants were the majority with more than ten children (Table 8.7). This means ones religious affiliation has no direct association with family size.

These findings are different from those found by Acharya (2010) in a study conducted in Nepal which revealed that, some religions like Islam do not have

restrictions on the number of wives, therefore the people belonging to this religious group get married to more than one wife and the number of children of these people are more than the people who belong to other religious groups. Lucas and Meyer (1994), Catholics were found to have higher fertility than Jews and Protestant while Moslems tend to have higher fertility than non-Muslims. Muhoza *et al*., (2014) strengthens this argument as he reported to find that fertility preference varies with religion and region. In Tanzania and Kenya, Muslim women were more likely to be in excess fertility, giventhe fact that they alsowantmany children as compared to Uganda and Rwanda. Among his study population, Muslim women had more children as compared to their non-Muslimcounterparts.

Takyi *et al*. (2006) emphasized that any variations in observed fertility behavior between religious groups reflect differential access to social and human capital (e.g., education) rather than religion per se. Thus, a debate continues as to whether differences in fertility behavior are due primarily to religious processes or the interplay of socioeconomic forces. It was observed during focus group discussions that some respondents believe it is important for people to have as many children as possible because there are people who are not capable of having any children so it is like compensating this shortfall:

> *"There are people who are not capable of giving birth, so it is important for those who are able to give as many children as possible. This is according to African traditions and is a blessing to the eyes of God (Mvomero woman aged 48years)."*

Obtained results revealed that there is great association statistically between ones religion affiliation and family size for both women and men (p=.002 and p=.000) respectively.

8.3.4 Respondents Religiousity

The results showed that most respondents both men and women from Kishapu and Mvomero districts reported to believe in God (96.9% and 100%) while for men were 90.7 percent from Kishapu and Mvomero district (99.4%) as shown in Table 8.8.

Table 8.8 Religious Participation of Respondents (%)

Category	Women			Men		
	Total	**Kishapu**	**Mvomero**	**Total**	**Kishapu**	**Mvomero**
Do you believe in God	98.6	96.9	100.0	95.6	90.7	99.4
Do you fast	51.5	39.5	61.0	53.9	32.6	70.7
Do you go to church/Mosque	80.2	61.2	95.1	76.8	48.8	98.8
Do you pray	82.9	65.1	97.0	79.1	53.5	98.8
Do you give offerings	80.8	62.0	95.7	80.5	58.1	98.2
N	**293**	**129**	**164**	**293**	**129**	**164**

Respondents who reported to fast were women and men from Mvomero (61% and 70.7%), most women respondents from Kishapu and Mvomero who reported to go to church and mosque were reported to pray and give offerings. The lowest participants in identified religious items were women and men from Kishapu (39.5% and 32.6%) who reported to fast and 48.8 percent of men from Kishapu who reported to go to church or Mosque (Table 8.8).

8.3.5 Couples Awareness on the Stand of their Religion on Family Planning

The results showed that, the vast majority of women and men from Kishapu and Mvomero districts reported that their religion does object to the use of

contraceptives, though they did not know why exactly, their religious leaders do not approve the use of modern family planning methods and that, their religious leaders normally do not talk about family planning (Table 8.9). This means these respondents believed to what they believe but they don't know exactly why their religion object about contraceptive use or not as their religious leader do not talk about it and so they think their religious leaders also are against contraceptive use.

Table 8.9: Respondent's Awareness on the Stand of their Religion on Contraceptive Use (%)

Categories	Women			Men		
	Total	**Kishapu**	**Mvomero**	**Total**	**Kishapu**	**Mvomero**
Whether respondent's religion object about the use of contraceptive use.	26.6	07.0	42.1	19.5	05.4	30.5
Whether religious leader approve the use of modern family planning methods.	19.5	20.5	18.9	36.2	43.4	30.5
Whether religious leaders talk about family planning.	19.1	18.6	19.5	37.2	41.9	33.5
N	**293**	**129**	**164**	**293**	**129**	**164**

Generally, a small proportion of respondents believe that their religion approves the use of contraceptives, their religious leader approves the use of modern family planning methods and that their religious leaders talk about family planning. This means that, respondents believe that their religions do not accept the use of modern family planning methods, and most of their religious leaders do not accept and that is why they don't even talk about family planning except occasionally during marriage

seminars. It was further revealed that majority of respondents are not involved in religious activities (Table 8.9).

According toThornton and Camburn (1989) as cited by Takyi et al., (2006) some researchers have argued that the religious context - in which individuals are socialized, impact on their family values, attitudes and practices about sexual behaviour and thus their fertility and denominational differences in teachings and sanctions against proscribed behaviour such as the use of contraceptives and premarital sex may influence the timing of marriage and fertility levels.

There were various comments observed during focus group discussions that religious leaders do not approve the use of modern contraceptives:

> *"Religious leaders do not like people to talk about family planning. For example there was this person who was a leader, he was heard by a religious leader advertising condom, and that leader called him privately and asks him not to do it again. That leader told the pastor that he was doing that as he was instructed by his superiors as it was part of his work, but the pastor did not accept that. Unfortunately, this guy died, but the pastor announced that he confessed and asked for forgiveness from God for advertising the use of condom before he died (Mvomero man aged 41years)."*

There are respondents who believed that their religions approve the use of natural family planning methods but not the modern contraceptive methods:

> *"Religion does not allow the use of modern contraceptives, it believe in having many children or the use of natural family planning methods and*

occasionally during teachings and preaching, religious leaders do talk about it (Christian)-(Mvomero woman aged 36years).

Muslim respondents also were in the opinion that their religion does not allow the use of modern contraceptives as this respondent commented:

"Religion does not allow the use of modern contraceptives; people have to give birth until they cannot any more. Muslims condemn the use of family planning methods as it is a sin to prevent children from being born (Islam)-(Kishapu man aged 52years)."

8.3.6 Index of Religiousity

The index was made from five variables and it ranged from 0 to 5. For each variable every "Yes" response was given a value of 1, which indicates high level of religiousity while "No" response was given a value of 0 meaning low level of religiousity.The values of the index were further categorized into Low, Medium and High levels of patriarchy. Scores of 0 to 2 were considered low, 3 medium and 4 to 5 High.

Results revealed that women respondents from Mvomero (95.1%) were highly religious as compared to women from Kishapu (61.2%). The pattern for men was not different as to that of women as 98.8 percent of men from Mvomero were highly religious as compared to 48.8 percent of men from Kishapu district. In general majority of respondents both women and men (80.2 percent and 76.8 percent) respectively, had highest level of religiousity and those with lowest level of religiousity were women and men with medium religiousity level (1.0% and 3.1%)

respectively (Table 8.10). This means respondents from Mvomero district are highly religious as compared to those from Kishapu.

Table 8.10: Respondents Religiousity Level (%)

Level of religiosity	Women			Men		
	Total	**Kishapu**	**Mvomero**	**Total**	**Kishapu**	**Mvomero**
Less religious	18.8	38.0	03.7	20.1	44.2	01.2
Medium religious	01.0	00.8	01.2	03.1	7.0	-
Highly religious	80.2	61.2	95.1	76.8	48.8	98.8
N	**293**	**129**	**164**	**293**	**129**	**163**

Some respondents reported to be going to traditional healers so that they can get assistance regarding child bearing (number and sex of children) as reported by this respondent;

> *"There are people who go to traditional healers so that they can get help to get children or children of certain sex or number, but the end of the day even the traditional healers have to pray to God for them to succeed so the end of the day, its God who is capable of all, whether you use contraceptives or not.(Kishapu men aged 39years)"*

Another respondent commented that some people do not go to church as they are afraid of becoming mentally ill because they believe once you start using witch craft you cannot be able to attend masses as usual as per this respondent:

> *"Some people relay only on traditional healers and because of this they do not go to church believing that if you are dealing with witch crafts (mshirikina) once you go to church you will have mental disorder (utawehuka)-(Kishapu men aged 50years)"*

8.3.7 Index of Religiousity and Contraceptive Use

The highest current contraceptive users for both women from Kishapu and Mvomero were among women with medium levels of religiosity (100%). The pattern for current contraceptive use for men was different as men from Kishapu district (71.4%) had high level of religiosity while for Mvomero districts were (100%). The lowest contraceptive users were men (43.9%) from Kishapu district with low level of religiousity and 58.9 percent from Kishapu district with high level of religiousity. Generally, all women respondents (100%) with medium level of religiosity were highest users of contraceptives and the lowest users were those with low level of religiosity (32.7%). On the other hand, 71.6 percent of men with highest level of religiosity were the highest current contraceptive users, and the least users were (44.1%) with low level of religiosity (Table 8.11). These results suggests that there is no association between level of religiousity and contraceptive use as there was no specific pattern that was observed.

These findings are different from those reported by Takyi *et al.,* (2006) that many Ghanaians spend a considerable amount of their time in faith and religious-based interactions where the diffusion of information on reproductive norms is more likely to occur and religion could provide the organizational context for behavioral change on fertility-related behaviour.

The intention to use contraceptives in the future was high to women from both Kishapu and Mvomero districts with medium level of religiosity (100%) while for

men it was 79.4 from Kishapu with high level of religiousityand all respondents from Mvomero with low level of religiousity.

Table 8.11:Respondents Religiousity Level and Contraceptive Use (%)

Level of religiosity	Current use					
	Women			Men		
	Total	**Kishapu**	**Mvomero**	**Total**	**Kishapu**	**Mvomero**
Low	32.7	30.6	33.3	44.1	43.9	100.0
Medium	100.0	100.0	100.0	55.6	55.6	-
High	64.7	58.2	50.0	71.6	71.4	58.4
ALL(N)	**59(173)**	**48.1(62)**	**50(82)**	**65.5(192)**	**58.1(75)**	**58.9(96)**
	Intention to use					
	Total	**Kishapu**	**Mvomero**	**Total**	**Kishapu**	**Mvomero**
Low	51.0	46.5	80.0	62.7	61.4	100.0
Medium	100.0	100.0	100.0	77.8	77.8	-
High	83.5	78.7	69.4	81.8	79.4	69.6
ALL(N)	**78.1(221)**	**67.2(80)**	**70.1(108)**	**77.8(288)**	**71.3(92)**	**70.1(114)**

Generally, women respondents with medium level of religiosity (100%) and 81.8 percent of men respondents with high level of religiosity had highest intention to use contraceptives in future (Table 8.11).

This indicates that their intention to use contraceptives in the future is not associated with their level of religiosity as there was no specific pattern that was observed to signify that. These findings are different from those reported by Takyi (2006) that, religion could either have a negative or positive impact on contraceptive use because the religious belief systems are primarily anti family planning as they tend to de-emphasize the use of contraceptives in traditional African societies. It is therefore no

surprisethat a number of studies find the various religious groups to differ in terms of their contraceptive use behavior in Ghana.

Some respondents were against having large family size due to hardships in life as pointed out by this respondent:

> *"The ideology is not applicable at present, as its better to have the number of children that you can afford to take care of them and therefore family planning is very important, the only problem is that these methods have side effects so it is better for specialists to find methods which are easy to use and harmless (Mvomero woman aged 46years)."*

8.3.8 Couples Religiousity Level and Family Size

The results revealed that majority of couples with high levels of religiousity were the majority in almost all categories (Table 8.12).

Table 8.12: Respondents Religiousity Level and Family Size (%)

Level of religiosity	**Women**					
	1-2	**3-4**	**5-6**	**7-8**	**9-10**	>10
Low	18.5	10.3	20.7	38.5	50.0	50.0
Medium	1.1	1.9	-	-	-	-
High	80.4	87.9	79.3	61.5	50.0	50.0
N	**92**	**107**	**58**	**26**	**08**	**02**
	Men					
	1-2	**3-4**	**5-6**	**7-8**	**9-10**	>10
Low	09.8	14.1	23.3	38.7	53.8	41.7
Medium	01.1	01.2	03.3	06.5	07.7	16.7
High	89.1	84.7	73.3	54.8	38.5	41.7
N	**92**	**85**	**60**	**31**	**13**	**12**

This is an indication that there is a link between religiousity and family size, indicating that religion encourages large family size in a way and possibly through discouragement of contraceptive use.

These results tend to differ with the report by Takyi et al. (2006) who emphasized that in comparison to the religious measures, it appears that the effects of the socioeconomic variables are quite stronger than the religiousity in explaining the number of children ever born in Ghana.

8.4 Ethnicity Influence on Contraceptive use and Family Size

8.4.1 Respondents Ethnicity

Analysis was conducted based on districts in order to know specifically ethnic groups which reside in each district. Obtained results showed that majority of women respondents from Kishapu district were Sukuma (89.1%) followed by other tribes (10.9%). These others were Masai, Kurya, Muha, Nyiramba, Nyamwezi and Chaga. Majority of women in Mvomero were Luguru (34.8%), Zigua (23.2%), Nguu (7.3%) and others (34.6%). These others were Nyaturu, Sangu, Irak, Muha, Ikizu, Haya, Yao, Zaramo, Nyasa, Ndali, Ngoni, Girinyima, Pare, Nyakyusa, Hehe, Mabwe, Nyiha, Bondei, Gita, Sagara, Fipa, Gogo, Chagga and Sandawe. Like women, majority of men respondents from Kishapu district were Sukuma (92.2%) followed by the rest of the tribes (8.1%), which included Muha, Nyiramba, Kurya and Ikizu (Table 8.13).

Looking into men respondents from Mvomero district, results showed that 40.9 percent of respondents were Sukuma, followed by Zigua (17.7%), Nguu (6.1%) and others 31.7 percent. Other tribes which were not shown in the table were Haya, Ndamba, Nyaturu, Makonde, Yao, Kaguru, Chagga, Kinga, Kaguru, Fipa, Pare, Rangi, Kamba, Zaramo, Iraki, Gita, Bondei, Sambaa, Hehe, Nyiha, Ngoni, Digo, Nyakyusa, Ndengereko, Nyiramba, Nyamwezi, Pogoro, Kaguru and Gogo. In general, the major tribes for women were Sukuma (39.9%), Luguru (19.5%) and Zigua (13%) while for men; the majorities were Sukuma (63.5%) and Zigua (9.9%) as in Table 8.13.

Table 8.13: Distribution of Respondents' Ethnicity by Sex and District (%)

Tribe	Women			Men		
	Total	**Kishapu**	**Mvomero**	**Total**	**Kishapu**	**Mvomero**
Sukuma	39.9	89.1	01.2	63.5	92.2	40.9
Luguru	19.5	-	34.8	01.0	-	01.8
Zigua	13.0	-	23.2	09.9	-	17.7
Nguu	04.1	-	07.3	03.4	-	06.1
Others	23.4	10.9	34.6	22.2	08.1	31.7
N	**293**	**129**	**164**	**293**	**129**	**164**

8.4.2 Respondents Ethnicity and Couples Contraceptive Use

The results showed that 47 percent of Sukuma women from Kishapu district were current contraceptive users and for Mvomero were Zigua (71.1%), and for men the majorities were Sukuma men (58%) from Kishapu district and for Mvomero were Luguru men (66.7%). Generally, 83.3 percent of Nguu women and 82.6 percent of Luguru men were the highest contraceptive users (Table 8.14).The results for women revealed that the association between respondents ethnicity and current contraceptive

use and intention to use contraceptives in the future is statistically significant (p=.002 and p=.000) respectively but not for men as in Table 8.14.

Table 8.14: Couples Ethnicity and Contraceptive Use (%)

Tribe	Current contraceptive use					
	Women			Men		
	Total	**Kishapu**	**Mvomero**	**Total**	**Kishapu**	**Mvomero**
Sukuma	46.2	47.0	50.0	62.9	58.0	59.7
Luguru	70.2	-	43.9	82.6	-	66.7
Zigua	52.6	-	71.1	75.9	-	55.2
Nguu	83.3	-	41.7	60.0	-	50.0
ALL(N)	**59(173)**	**48.1(62)**	**50(82)**	**192**	**58.1(75)**	**58.5(96)**
Chi-square for women current contraceptive use=17.026[a] significant at p<.05						
Tribe	**Intention to use contraceptives**					
	Total	**Kishapu**	**Mvomero**	**Total**	**Kishapu**	**Mvomero**
Sukuma	69.2	68.6	50.0	74.7	71.4	68.7
Luguru	86.0	-	66.7	100.0	-	100.0
Zigua	81.6	-	80.6	86.2	-	65.5
Nguu	91.7	-	66.7	80.0	-	60.0
ALL(N)	**78.1(221)**	**67.2(80)**	**70.1(108)**	**228**	**71.3(92)**	**70.1(115)**
Chi-square for women intention=19.836[a] significant at p<.05						

8.4.3 Ethnicity by Fertility Preference

Results showed that majority of women respondents in all categories were Sukuma having up to more than ten children and the tribe with lowest number of children were Nguu with up to six children. Sukuma men respondents were the majority in all categories with Luguru and Zigua men having relatively lower family size (Table 8.15). This could be due to the social and economic value placed on children traditionally by Sukuma people more as compared to the rest of the tribes.

Table 8.15: Respondents Ethnicity by Family Size (%)

Tribe	**Family size (Women)**					
	1-2	**3-4**	**5-6**	**7-8**	**9-10**	**>10**
Sukuma	33.7	31.8	48.3	57.7	87.5	100.0
Luguru	19.6	26.2	12.1	15.4	-	-
Zigua	19.6	13.1	8.6	3.8	-	-
Nguu	01.1	6.5	6.9	-	-	-
N	**92**	**107**	**58**	**26**	**08**	**02**
Chi-square for women family size=33.397[a] significant at p<.05						
Tribe	**Family size (Men)**					
Sukuma	54.3	69.4	56.7	67.7	84.6	91.7
Luguru	01.1	-	03.3	-	-	-
Zigua	12.0	12.9	11.7	-	-	-
Nguu	03.3	02.4	06.7	03.2	-	-
N	**92**	**85**	**60**	**31**	**13**	**12**

Generally, all the major tribes had high family size of more than four children but there was no established link as the pattern was the same throughout even for those with small family size like Sukuma. The large family norm still exists in the study area as reported by one of the elders:

> *"In the past couples used to have more than ten children, but now days some people have only two children. I think it is okay to use family planning, but couples should start using when they have at least four or five children (Mvomero elder aged 75yrs)"*

8.4.4 Logistic Regression Model Results

A binary logistic regression analysis was conductedto predict contraceptive use by using ethnicity as predictor**.** A test of the full model against a constant only model was statistically significant, indicating that the predictors as a set of reliably

distinguished contraceptive users and non-users (Chi-square 19.727, p<.001 with df=4). Nagelkerke's R^2 of .088 indicated a weak relationship between prediction and grouping. However, prediction success overall was 62.1% for contraceptive use.The Wald Criterion demonstrated that ethnicity made a significant contribution to prediction with Sukuma (p=.001) and Zigua (p=.052). Luguru and Nguu were not significant predictors of contraceptive use. The odd ratio value indicated that Sukuma women are .36 times and Zigua women are .44 times more likely not to use contraceptives than the rest, therefore rejecting null hypothesis (Appendix VIIf-1).

8.5 Chapter Summary

Patriarchy was found to exist in both study areas. High levels of patriarchy was found among women respondents from Kishapu but majority of men reported neutral levels of patriarch more in Mvomero than Kishapu. Contraceptive use was found to be higher among women respondents from Kishapu with low to neutral levels of patriarchy and for men were those with high levels of patriarch more in Mvomero than in Kishapu. Intention to use contraceptives in the future was found to be higher among women respondents with high levels of patriarch while for men were those with low levels of patriarchy. Contraceptives were found to be associated with patriarchy for both men and women but not for intention to use contraceptives in the future. The level of patriarchy was further found to be linked with the number of children respondent has especially for women but not for men.

Majority of respondents from Kishapu belonged to traditional religion while for Mvomero were Catholics. Sabbath and Catholics women from Kishapu were the

majority of contraceptive users and for men were Catholics and Moslems, while EAGT and Moslem women from Mvomero were the majority but for men were Muslims and Catholics. Lowest contraceptive users were women and men from Kishapu who were traditional believers. Intention to use contraceptives in the future was high among EAGT and Moslem women from Kishapu and EAGT and Catholics from Mvomero. Men respondents from Kishapu with highest intention to use contraceptives in the future were Catholics and for Mvomero were Moslems. The lowest intention to use contraceptives in the future was found among women who were traditional believers and men belonging to EAGT.

Catholics and traditional believers (both women and men) had the largest family size. Religiousity level was found to be higher among Mvomero respondents as compared to Kishapu respondents. Based on the religiousity level, the highest contraceptive users were respondents with neutral level of religiousity while for men were men from Mvomero with high level of religiousity. The lowest contraceptive users were women and men from Kishapu with low level of religiousity. Intention to use contraceptives in the future was high among women respondents with neural level of religiousity and for men were those with high level of religiousity from Kishapu. Family size was found to be associated with religiousity level as respondents with high level of religiousity were the majority in almost all categories. Smallest family size was found among women with medium level of religiousity.

Sukuma women and men were the majority in Kishapu district while Luguru women and Sukuma men were the majority in Mvomero district. Sukuma women from

Kishapu and Zigua women from Mvomero were the highest contraceptive users while Sukuma men from Kishapu and Luguru men from Mvomero were Sukuma women from Kishapu and Zigua women from Mvomero showed the highest intention to use contraceptives in the future as well as Sukuma men from Kishapu and Luguru men from Mvomero. Looking into family size, Sukuma men and women were the majority in all categories. The lowest family size was found among Nguu women and Zigua and Nguu men with 5-6 children which was moderately large family size.

CHAPTER NINE

CONCLUSION AND RECOMMENDATIONS

9.1 Chapter Overview

This study examined the determinants of couples' decision on fertility preference in selected social, economic and cultural factors, and the following were the conclusions and recommendations. The chapter ends with the suggestions for further research.

9.2 Conclusion

9.2.1 Objective 1: The impact of Social Network on Couple's Decision on Fertility Preference

Social networks were found to have significant and substantial effect on contraceptive use, and therefore family size more to men than women. This is because men are more likely to be influenced by their network partners than women. This could also have been associated with cultural norm of exogamy and patrilocality that result in men having known their network partners since childhood, whereas women alter their network partners after marriage. Interaction process therefore suggests that social networks are likely to have large effect on behaviour as long as the contraceptive use is not widely disseminated.

However, due to shortage of health centers and service providers - especially in Kishapu District, it is very likely that though social network members exchange information regarding family planning, it is very likely the provided information to be incorrect due to misinformation.

9.2.2 Objective 2: The Influence of Communication among Couples on Fertility Preference

Couples communication was observed to be one of the significant determining factors for couples' contraceptive use and family size. It was apparent from this study that couples communication on reproductive issues is rare in the study area though the majority had positive attitude towards couples' communication, but it is clear that having positive attitude alone is not enough to take action. For communication to be effective to influence fertility preference the number of times couple communicates matters a lot. It was stressed by women in the qualitative findings that women are ready to discuss but their spouses are not. When couples discuss family planning matters they tend to have high contraceptive use and low fertility preference, implying that inter-spousal communications make them able to make better family decisions.

9.2.3 Objective 3: The Influence of Couple's Socio-Economic Status on Fertility Preference

This study showed that majority of couples reported relatively low level of autonomy, and this is because majority of couples reported joint decision making with their spouses on various issues. However, women reported that they do participate in decision making but the final say is with their husbands. Qualitative findings revealed that even men themselves are making discussions strategically knowing that women have no say on the final decision. Having closely same education level, it means this behavior is due to deeply rooted cultural norms which subordinate women's position in the presence of men.

The study demonstrated that even primary education level creates big difference in couple's contraceptive use and therefore fertility levels. The more the increase in education levels the higher the contraception rate and a decrease in family size, more so to couples from Mvomero than Kishapu districts. Education influences contraceptive use and fertility levels by changing views and life styles, which are consistent with, lower fertility, encouraging communication among couples, which is not the case in the study areas. This is due to poor distribution of respondents in various education levels as the majorities had primary education.

Occupation was found to be statistically significant. Couples involved in agriculture were less likely to use contraceptives and more likely to have large family size, though it was not statistically significant. This is due to the fact that education is related to economic status of the family, which provides couples with exposure to modern ideas and hence influences their fertility behavior. This was not the case to the study areas as almost all respondents were located in the rural and peri-urban areas and therefore not employed in government or private sectors and their levels of education were relatively low (majorities had primary education).Ownership of property was also found to have significant effect on the respondents' family size especially for men and contraceptive use for women.

9.2.4 Objective 4: The Influence of Culture on Fertility Preference

Traditionally, social structure has been based on two kinship patterns,- the patrilineal and matrilineal systems. High levels of patriarchy were found in Kishapu than Mvomero district. This could be due to the background of Mvomero respondents who reported to have matrilineal system in the past but it has been disappearing due

to mixed marriages among other factors. The persistence of high fertility is deeply rooted in the patriarchal system with its emphasis on family and descendants, as is the case of Kishapu and Mvomero districts. Male dominance is particularly profound in matters of reproduction and they generally view reproduction as their prerogative, an issue in which the compliance of their wives is taken for granted as is the case for the two study areas.

Denominational differences in teachings and sanctions against proscribed behavior such as the use of contraceptives and fertility levels can have negative or positive effect. Obtained results showed a great association between respondents' contraceptive use and family size for both men and women. There was also a link between levels of religiosity and contraceptive use with more religious couple having more children. This could be associated with religious belief systems, which are primarily discouraging the use of family planning.

Ethnicity appeared to have significant association with contraceptive use and family size especially among Sukuma respondents as compared to the rest of the groups. This could be due to the social and economic value placed on children traditionally by Sukuma people more as compared to the rest of the tribes among other factors including low levels of education.

9.3 Recommendations

9.3.1 National Level

1. Regional variation with respect to family size and contraceptive use should be taken into consideration; family planning programs should be more intensified in

both districts to make the smaller-family norm more popular in these two districts.

2. More qualified staff of various ranks should be employed in order to bridge the gap between service providers and clients, which though reduced - as compared to the past, but still is the concern especially to Kishapu district making it one of the reasons for high drop outs of contraceptive use and low contraceptive use prevalence in general resulting to high fertility levels.

3. Available service providers should be trained in order to increase their knowledge on family planning. Health Sector Lake Zone, does sometimes offer training but their conditions are specific as they need medical attendants. So, if there are no medical attendants the chance is lost. More training to different groups of service providers should be encouraged in order to offer effective and reliable service to their clients.

4. Strategy should be undertaken to ensure that people are educated - at least up to secondary level, because secondary level education contributes to a significant change in contraceptive use and family size, and also opportunities for adult education should be increased to help the older men and women overcome the traditional ideas and internalize the smaller-family norm.

9.3.2 Programme Level

1. Men should be encouraged - at all levels of the program, to fully participate in all family planning and reproductive and health issues at all levels as they are the decision makers in most of the households in Tanzania. Their decision-making

role should be exploited in order to promote contraceptive use by couples in Tanzania.

2. Programs aimed at increasing contraceptive prevalence may need to involve different approaches, including promoting couples' discussions on reproductive health and family planning in particular, which in turn may influence couples' contraceptive use and family size. This can be addressed during family planning counseling or through mass media as well.

3. Religious leaders can be mobilized, properly trained and involved in the family planning programs to provide people with the proper knowledge and correct the misinterpretation regarding religious teaching, thus generating smaller family norm among the conservative and less educated couples. In a culturally conservative society, it might be difficult to motivate religious leaders to be involved in such projects. However, it can be started at a small scale involving better educated and leading religious leaders who then can influence others.

4. To conduct community advocacy and mobilization in order to increase family planning awareness, use and eventually a decrease in fertility levels. This will help reduce beliefs that people have on contraceptives especially modern contraceptives.

9.3.3 Individual Level

1. Male service providers should be role models to their fellow men. It is assumed that if a male service provider is using or encourage fellow men to use certain

contraceptive use like vasectomy, he can easily understood unlike at present where you may sometimes find male service provider discouraging fellow men to use contraceptives resulting to low contraceptive use among couples.

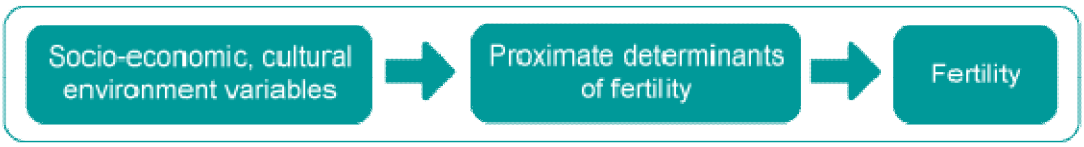
2. Men can be involved into dissemination of information and knowledge to their wives and communities concerning family planning sources and their advantages. They can be motivated to support and encourage their wives in using contraceptive methods as well. This will ultimately empower them to make the right decisions for the betterment of their families.

3. Couples family planning can be improved by mobilizing men to deliver services to other men. Men who are convinced or satisfied users of family planning could serve as peer motivators to reinforce use of male family planning methods.

9.4 Appraisal of Theoretical Framework

Human fertility is governed by a number of immediate biological and behavioural factors, which are themselves influenced by other socio-economic and cultural factors. The assessment of the determinants of couple's decisions on fertility preference used proximate determinants of fertility together with socio- economic and cultural factors as suggested by Bongaart's (1978) Model of Proximate Determinants. The study looked into possible effects of these factors on fertility. Proximate determinants are principally characterized by their direct influence on fertility of women (Bongaarts, 1978). The proximate determinants (the biological and behavioural factors through which social, economic, cultural and environmental

variables influence fertility directly) involved in this study were marriage and contraceptive use.



Source: Bongaarts and Potter (1983)

As proposed in Bongart's model, it was observed from this study - that social networks, communication, education, equity, employment, religion and ethnicity have directand indirect influence on couple's fertility. As a whole, the two proximate determinants of fertility - namely, contraceptive and marriage have direct and indirect effect in fertility. Normally, a woman's reproductive period begin at menarche, and a woman may be considered to be at risk of pregnancy until the onset of menopause. Therefore, entry to marriage or cohabitation practically is the starting point of the actual exposure to the risk of pregnancy, unless marital disruption occurs. Therefore, the findings from this study showed that most components in the model were relevant and helpful in explaining fertility preference among couples.

Despite its strong theoretical contribution, Bongaart's and Porter's proximate determinants model has its own limitations. It failed to realize that marriage is not a reliable indicator of entry to sexual activity as there are many women who are sexually active and they are not in marriageunion. Furthermore, exposure to pregnancy within marriage or union, that is, frequency of sexual intercourse, varies across populations, while the proximate determinants framework assumed the coital frequency are similar across different populations.

Moreover, Bongaarts and Porter also believed that the use of contraceptives can also control fertility, but they failed to realize that contraception does not protect women from pregnancy unless couples use the method which they have chosen effectively and consistently and for this to happen the availability of those contraceptives is another factor to be considered. It is assumed that only fecund women use contraceptives. This assumption is true in most cases. However, in some settings, a good number of women may have undergone sterilization in areas where sterilization is the primary method of family planning. In this case sterilized women are not fecund and are not using contraceptives.

The framework was intended to aid the analysis and explanation of fertility differentials, by focusing interest on the links between each of the proximate fertility variables and various socio-economic and cultural factors. Therefore, there will always be variations in the level of fertility due to other factors or due to the framework itself as it is the case in this study.

9.5 Recommendation for Further Research

This study is just a cross sectional study at micro level. Many factors which have been discussed in this study need further researching and different analysis in order to obtain a better understanding of reproductive behaviour of couples in Tanzania. Whether these factors affect contraceptive use and family size positively, negatively or not at all cannot be conclusive. It is advisable to conduct longitudinal studies as well which will be able to follow a cohort of couple in a certain period of time.

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APPENDICES

Appendix I: Research Clearance

THE OPEN UNIVERSITY OF TANZANIA

DIRECTORATE OF RESEARCH, PUBLICATIONS AND POSTGRADUATE STUDIES

P.O. Box 23409
Dar es Salaam, Tanzania
http://www.out.ac.tz

Tel: 255-22-2666752/2668445 Ext.2101
Fax: 255-22-2668759
E-mail: drpc@out.ac.tz

REF: HD/A/406/T.12 **Date: 07/08/2013**

TO WHOM IT MAY CONCERN

RE: RESEARCH CLEARANCE: HARRIETH MTAE

The Open University of Tanzania was established by an act of Parliament No. 17 of 1992. The Act became operational on the 1st March, 1993 by public notes No. 55. Act number 7 of 1992 has now been replaced by the Open University of Tanzania Charter which is in line with the university act of 2005. The Charter became operational on 1st January, 2007. One of the mission objectives of the university is to generate and apply knowledge through research. For this reason the staffs and students undertake research activities from time to time

To facilitate the research function, the Vice Chancellor of the Open University of Tanzania was empowered to issue research clearance to both staffs and students of the university on behalf of the Government of Tanzania and the Tanzania Commission for Science and Technology.

The purpose of this letter is to introduce to you **Harrieth G. Mtae** a PhD student at the Open University of Tanzania **Registration No. HD/A/406/T.12** By this letter **Harrieth G. Mtae** has been granted clearance to conduct research in the country. The title of her research is ***"Determination of Couples Decisions on Fertility preference in Tanzania*** The research will be conducted in Mvomero District, Morogoro and Kishapu District, Shinyanga as from 12/08/2013 to 12/11/2013.

In case you need any further information, please contact the Deputy Vice Chancellor (Academic), The Open University of Tanzania, P. O. Box 23409,**Dar Es Salaam,** Tel: 022 2 2668820

We thank you in advance for your cooperation and facilitation of this research activity.

Yours sincerely,

THE OPEN UNIVERSITY OF TANZANIA

JAMHURI YA MUUNGANO WA TANZANIA
HALMASHAURI YA WILAYA MVOMERO

SIMU NA. 023 - 261 3223
Fax Na. 023 -261 3007

Unapojibu Tafadhali taja

Kumb.Na.MVDC/D. 30/15 VOL II/71

OFISI YA MKURUGENZI MTENDAJI (W)
HALMASHAURI YA WILAYA YA MVOMERO
S.L.P 663,
MOROGORO

16/9/2013

HARRIETH G. MTAE,
S.L.P 23409,
DAR ES SALAAM.

YAH: KIBALI CHA KUFANYA UTAFITI

Tafadhali husika na somo la hapo juu.

Kibali kimetolewa kwako kama ulivyoomba kwa barua kumb Na. REF DH/A/406/T.12 ya tarehe 7/8/2013 yenye mada tajwa hapo juu. Utafiti huu utafanyika katika Kata nne ambazo ni Nyandira, Dakawa Hembeti na Mhonda. Ukiwa huko utashikiana na Watendaji wa Kata hizo husika katika kufanikisha zoezi hili.

Nakutakia mafanikio katika utekelezaji.

P.P. A.A. Mwakalyelye
K.n.**y MKURUGENZI MTENDAJI**
HALMASHAURI YA WILAYA
MVOMERO

Nakala:-
Watendaji wa Kata Nyandira,Dakawa,
Hembeti na Muhonda - Mpeni ushirikiano

Appendix II: Introduction and Consent

Hello. My name is **Harrieth Godwin Mtae** and I am working with the Open University of Tanzania. I am conducting a research on reproductive health as part of my PhD study. I would very much appreciate your participation in this research. The interview will take not more than 30mns to complete. All of the answers you will provide will remain confidential. I hope you will participate in this study since your views are very important.

At this time, do you want to ask me anything about this study?

May I begin the interview now?

Signature of interviewer. . . . . .

Respondent agrees to be interviewed . . . . . .

Respondent does not agree to be interviewed. . . . . .

Date. . . . . .

Appendix III(A): Questionnaire for Married Women Aged 15-49 Years of Age

SECTION A: RESPONDENT IDENTIFICATION

A1. Questionnaire number:.....
A2. Date:.....
A3. District:.....
A4. Ward:.....
A5. Village/street:.....
A6. Hamlet:.....
A7. Household name/No.....
A8. Interview date.....

SECTION B: RESPONDENT CHARACTERISTICS
NB: Always circle the letter corresponding to the response except where stated otherwise.

B1. What is your age?.....(in complete years)

B2. In which tribe do you belong?.....

B3. Have you ever attended school?
a. Yes
b. No

B4. If **"Yes"** what was the highest level attended?
a. Incomplete primary school
b. Complete primary school
c. Incomplete secondary school
d. Complete secondary school
e. Higher than secondary school

B5. What is your marital status?
a. Married
c. Living together
g. Other (specify)……

B6. What type of union are you in
a. Monogamous
b. Polygamous
c. Others.....

B7. Who is the head of the household?
a. Respondent
b. Husband
c. Other (specify).....

C: WOMEN INFORMATION ON REPRODUCTION.

Now I would like to ask you about all the births you have had during your life.

C1. Have you ever given birth?
a. Yes
b. No

C2. How many children to whom you have given birth who are currently living together with you?
a. Daughters.....
b. Sons.....

C3. How many living children to whom you have given birth who are not staying with you?
a. Sons.....
b. Daughters.....

C4. **Sum totals of question C2 and C3 and enter total**
Total.....

C5. Just to make sure that the information I have is right, you have had in total …..... births during your life. Is that correct?
a. Yes
b. No

C6. Have you ever given birth to a boy or girl who was born alive but later died?
a. Yes
b. No

IF NO, PROBE: Any baby was born alive but did not survive

C7. Of the children you have had how many were boys and how many were girls who have died?
Girls.....
Boys.....

C8.**Sum totals of question C7 and enter total**
Total.....

SECTION D: ATTITUDE TOWARDS FAMILY SIZE AND SEX PREFERENCE.

D1. If you could have a chance to have exactly a number of children that you always wanted, how many children would you have in total before completing your family size?.....

D2. If you could have only 3 children in total, which combination would you choose?
a. 3 girls
b. 1 boy and 2 girls

c. 2 boys and 1 girl
d. 3 boys

D3. Suppose the only choice you could have was 2 boys and 1 girl or 3 girls, which one would you prefer?
a. 2 boys and 1 girl
b. 3 girls

D4. Imagine that you have another alternative choice between 3 boys or 3 girls, which one would you choose?
a. 3 boys
b. 3 girls
D5. Now suppose you have to choose only between either 3 boys or 2 girls and a boy, which set will be your choice?
a. 3 boys
b. 2 girls and a boy

D6. In case you could only choose one of the following combinations of children, which one could be your choice?
a. No children
b. 1 boy and 1 girl
c. 2 boys and 2 girls
d. 3 boys and 3 girls

D7. Suppose that you could only choose between having either no children or having 2 girls and 2 boys, which one could be your choice?
a. No children
b. 2 girls and 2 boys

D8. Imagine that you could only choose between having either 1 girl or 1 boy and having 3 girls and 3 boys, which combination would you choose?
a. 1 girl and 1 boy
b. 3 girls and 3 boys

D9. Finally, imagine that you could only choose between having one child or having 3 girls and 3 boys, which combination would you choose?
a. One boy child
b. One girl child
c. 3 girls and 3 boys

SECTION E: ATTITUDE TOWARDS CONTRACEPTIVE USE.
Now let us discuss about contraceptive use. There are many methods that can be used by both men and women to avoid the pregnancy.

NB: Circle (a) in E1-E13 for each method mentioned promptly. Then proceed down the column reading the name and description of each method not mentioned promptly. Circle (b) if respondent knows the method and (c) if not known. Then,

for each method with (a) or (b) circle, continue with the next column before proceeding to the next method.

Method	**Have you ever heard of (METHOD)?**	**Have you ever used (METHOD)?**
E1.FEMALE STERILIZATION: Women can have an operation to avoid having any more children	a) Yes/promptly b) Yes/unpromptly c) No	a) Yes b) No c) Na
E2. MALE STERILIZATION: Men can have an operation to avoid having any more children	a) Yes/promptly b) Yes/unpromptly c) No	a) Yes b) No c) Na
E3. IUD: A woman can be inserted a small flexible device in her uterus to avoid the pregnancy	a) Yes/promptly b) Yes/unpromptly c) No	a) Yes b) No c) Na
E4. INJECTABLES: A woman receives injection to prevent pregnancy	a) Yes/promptly b) Yes/unpromptly c) No	a) Yes b) No c) Na
E5. IMPLANTS: Plastic capsules about a size of matchstick inserted under a skin of woman's upper arm to prevent a pregnancy.	a) Yes/promptly b) Yes/unpromptly c) No	a) Yes b) No c) Na
E6. PILLS: A woman may swallow a pill every day to avoid pregnancy	a) Yes/promptly b) Yes/unpromptly c) No	a) Yes b) No c) Na
E7. FEMALE CONDOM: Men can use a rubber sheath during sexual intercourse	a) Yes/promptly b) Yes/unpromptly c) No	a) Yes b) No c) Na
E8. DIAPHRAGM: Kind of pills or jelly that a woman put in her vagina before sexual intercourse to avoid conception.	a) Yes/promptly b) Yes/unpromptly c) No	a) Yes b) No c) Na
E9. RYTHIM: Couples can avoid having sexual intercourse on certain days of the month	a) Yes/promptly b) Yes/unpromptly c) No	a) Yes b) No c) Na
E10. WITHDRAWAL: Men can be careful and pull out before climax	a) Yes/promptly b) Yes/unpromptly c) No	a) Yes b) No c) Na
E11. Lactational Amenorrhea Method (LAM)	a) Yes/promptly b) Yes/unpromptly c) No	a) Yes b) No c) Na
E12. Other modern method ….....		a) Yes b) No c) Na
E13. Other traditional method ….....		a) Yes b) No c) Na

E14. Are you and your husband currently using any method of contraception?
a. Yes
b. No

E15. If **"Yes"** which method are you currently using?
a. Female sterilization
b. Male sterilization
c. IUD
d. Injectables
e. Implants
f. Pill
g. Female condom
h. Diaphragm
I. Rhythm
j. Withdrawal
k. Other modern Method.....
l. Other traditional method.....
E16. What are the reason(s) for the choice of this method?
.....
.....

E17. What are your views on other family planning methods?
.....
.....

NB: The following questions should be asked only to those who responded 'No' to allmethods in Q.E1-E13

E18. Have you ever used anything or tried to in any way to delay or avoid getting pregnant?
a. Yes
b. No
If **'Yes'** what method have you used?.....

Correct question E1-E13

E19. If you have never used any method, what is the main reason for doing so?
a. Partner disapprove
b. Religious reasons
c. Fears about side effects
d. Health concerns
e. Lack information about use
f. Methods not available
g. Methods expensive
h. Want more children
I. Does not know any method
j. Methods reduce sexual pleasure
k. Partner will become unfaithful
l. Others (specify).....

NB: The following questions should be asked only to those who responded 'Yes' to any of themethods in Q.E1-E13

E20. Do you intend to use or continue to use contraceptive in future?
a. Yes
b. No
c. Don't know

E21. If **"Yes"** how likely is it that you will use contraceptive in future?
a. Very unlikely
b. Unlikely
c. Uncertain
d. Likely
e. Very likely

E22. If **"No"** what is the main reason?
a. Partner disapprove
b. Religious reasons
c. Fears about side effects
d. Health concerns
e. Lack information about use
f. Methods not available
g. Methods expensive
h. Want more children
I. Does not know any method
j. Methods reduce sexual pleasure
k. Partner will become unfaithful
l. Others
(specify).....

SECTION F: ATTITUDE TOWARDS COUPLES COMMUNICATION ON FAMILY PLANNING.
Now I would like to discuss with you on the husband and wife discussions about reproductive matters, family planning, number of children to have and sex composition.

F1. Have you ever talked with your husband about how many children a woman should have?
a. Yes
b. No

F2. In the past year have you and your husband discussed about family planning?
a. Yes
b. No

F3. If **"Yes"** how many times have you discussed with your husband?.....

F4. In the past one year have you and your husband discussed about using particular method to avoid pregnancy?
a. Yes
b. No

F5. If **"Yes"** what method did you discuss about?
a. Female sterilization
b. Male sterilization
c. IUD
d. Injectables
e. Implants
f. Pill
g. Female condom
h. Diaphragm
I. Rhythm
j. Withdrawal
k. Other modern Method.....
l. Other traditional method.....

NB: If the respondent fails to mention at least one method correct answer for Q.F2-F4 to "No"

F6. In the past one month have you and your husband discussed about using a particular method to avoid a pregnancy?
a. Yes
b. No

F7. If **"Yes"** how many times did you discuss about it? .....

F8. Which method did you discuss about?
a. Female sterilization
b. Male sterilization
c. IUD
d. Injectables
e. Implants
f. Pill
g. Female condom
h. Diaphragm
I. Rhythm
j. Withdrawal
k. Other modern Method.....
l. Other traditional method.....

F9. Who initiated the talk about family planning?
a) Husband
b) Wife

NB: If the respondent fails to mention at least one method correctly change answer for Q.F6 to "No". Please for the following statements indicate (by putting a tick) whether you strongly agree, agree, uncertain, disagree or strongly disagree about husband and wife communication.

NB: TICK THE RESPONSES IN THE APPROPRIATE BOXES.

Statement	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
F10. Husband and wife should discuss about the number of children a woman should have					
F11. Husband and wife should make joint decisions about contraceptive use					
F12. Planning for a family is the responsibility of a husband					
F13. Communication between husband and wife should exclude family planning					
F14. Communication between husband and wife on postponing childbearing is not beneficial to the family					
F15. Is it important for the spouses to communicate with each other on matters of family planning					
F16. Husband and wife should discuss together if they want to delay childbearing					
F17. Men should be less involved in discussing about family planning with their wives					
F18. Communication between husband and wife about family planning should be encouraged					
F19. Husband and wife should never communicate about issues related to family planning					

F20. Do you approve or disapprove husband/wife communication on family planning?
a. Approve
b. Disapprove

SECTION G: COUPLES SOCIAL ECONOMIC STATUS AND HOUSEHOLD DECISION MAKING ON VARIOUS ISSUES

G1. How old was your husband on his last birthday? .....

G2. What is your main source of income?
a) Crop farming
b) Livestock keeping
c) Casual business
d) Casual labour
e) Employed
f) Housewife (dependent on my husband)

G3. Aside from your own housework, have you done any other work in the last seven days?
a. Yes
b. No

G4. What is your occupation, that is, what kind of job do you mainly do? .....

G5. Who do you work for?
a. For family member
b. For someone else
c. Self-employed
d. Others.....

G6. Are you paid in cash or in kind for this work or you are not paid at all?
a. Cash only
b. Cash and kind
c. In kind only
d. Not paid

G7.Who usually decides how the money you earn will be used?
a. Respondent
b. Husband/partner
c. Respondent and husband/partner jointly
d. Other (specify).....

G8. Would you say that the money that you earn is more than what your husband/partner earns less than what he earns, or about the same?
a. More than him
b. Less than him
c. About the same
d. Husband/partner has no earning
e. Don't know

G9. Who usually decides how your (husband's/partner's) earnings will be used?

a. Respondent
b. Husband
c. Respondent and husband jointly
d. Husband has no earning
e. Other (specify).....

G10. Who usually make decision about health care for yourself?
a. Respondent
b. Husband/partner
c. Respondent and husband/partner jointly
d. Other.....

G11. Are you using any form of contraceptive?
a. Yes
b. No

G12. Who decide whether to use contraception or not?
a. Myself
b. Husband
c. Jointly

G13. Is your husband aware that you are using contraceptives?
a. Yes
b. No

G14. Is your husband using any form of contraceptives?
a. Yes
b. No

G15. Who decided on his use of that particular contraceptive?
a. Himself
b. Wife
c. Jointly

G16. Who usually make decisions about making major household purchases?
a. Respondent.
b. Husband/partner
c. Respondent and husband/partner jointly
d. Other.....

G17. Who usually make decisions about visits to your family or relatives?
a. Respondent
b. Husband/partner
c. Respondent and husband/partner jointly
d. Someone else.....

G18. Who own this house?
a. I own it
b. My husband own it
c. Both
d. Rented
e. Others.....

G19. Do you own any land ?
a. Yes
b. No

G20.If the answer to question G25 above is **"Yes"** how do you own it?
a. Alone
b. Jointly
c. Others.....

Please for the following statements indicate whether you strongly agree, agree, uncertain, disagree or strongly disagree about whether a husband is justified on hitting or beating her wife in the given situations.

Q. No.	**STATEMENT**	**Strongly agree**	**Agree**	**Uncertain**	**Disagree**	**Strongly disagree**
G27	Husband should beat his wife if he found out that she uses contraceptives covertly.					
G28	Husband is not allowed to beat his wife if she goes out without telling him.					
G29	A woman should not be hit by her husband if she neglects the children					
G30	A woman deserves to be hit if she argues with her husband.					
G31	Husband should beat his wife if she refuses to have sex with him					
G32	Husband should not beat his wife if she burns the food.					

SECTION H: SOCIAL NETWORK

We all talk to others about important matters in our lives. I would like to ask you about the people other than your husband whose opinions are important to you. They are people with whom you discuss your personal affairs or private concerns, such as children's illness, schooling, pregnancy, work, and church. They can live nearby or far away, and you might talk to them frequently or infrequently.

H1. Can you please give me the names of 4 people whose opinions matter to you?

NAME	**SEX**		**RELATIONSHIP***
	MALE	**FEMALE**	

* 1= Friend 2= mother 3= mother in law 4=sister 5=Sister in law 6.brother 7= Pastor/Sheikh 8= Grandmother 9= Others.....

I would like now to ask you about the people other than your husband with whom you discuss modern contraception. These are people with whom you have discussed the costs and benefits of modern contraceptive methods, where they can be obtained, their side effects, and how the methods are used. These people can live nearby or far away, and you might talk to them frequently or infrequently.

H2. Other than your husband/partner, can you please tell me the people with whom you have discussedmodern contraception in the last 12 months?
a.….....
b. ….....
c. ….....
d. ….....

H3. Has [Name] ever encouraged or discourage you to use a modern contraception to avoid or delay pregnancy?

NAME	**RELATIONSHIP**	**RESPONSE**	
		ENCOURAGE	**DISCOURAGE**
1			
2			
3			
4			

* 1= Friend 2= mother 3= mother in law 4=sister 5=Sister in law 6.Brother 7= Pastor/Sheikh 8= Grandmother 9= Others.....

H4. Which method(s) did you chat about? **(*put a tick where appropriate*).**

No.1	**No.2**	**No.3**	**No.4**	**METHOD**
				Female sterilization
				Male sterilization
				IUD
				Injectables
				Implants
				Pill
				Female condom
				Diaphragm
				Rhythm
				Withdrawal
				Other modern Method
				Other traditional Method

G5. Who initiated the discussion about Family Planning?
a. ….....
b. ….....
c. ….....
d. ….....

H6. Which family planning method is **(NAME)** using?

No.1	**No.2**	**No.3**	**No.4**	**METHOD**
				Female sterilization
				Male sterilization
				IUD
				Injectables
				Implants
				Pill
				Female condom
				Diaphragm
				Rhythm
				Withdrawal
				Other modern Method.....
				Other traditional Method.....

H7. How did you know that **(NAME)** is using modern contraceptive method?

NAME	**RESPONSE**
1	
2	
3	
4	

SECTION I: RELIGION AND RELIGIOUSITY

I1. What is your religious affiliation?
a. Moslem
b. Catholic
c. Protestant
d. Tradition
e. Others (specify).....

Now I would like to ask you some questions about your religiosity. Please answer "Yes" or "No" in every question and state frequency of relevant questions

Question	**Yes**	**No**	**If yes how many times per week/yr**
I2. Do you believe in God			NA
I3. Do you fast			
I4. Do you go to the church/mosque			
I5. Do you pray			
I6. Do you give offering			

* 1=Never, 2=Once per week 3=More than once per week 4=Once per month 5=More than once per month 6=Once per year 7=More than once per year 8=Other (specify).....

I7. If **"No"** why? .....

I8.When was the last time you went to church (or mosque)?
a. In the last week
b. In the last month
c. Last 2-6 months
d. More than 6 months ago
e. Never

I9. Does your religion object in the use of contraceptives?
a. Yes
b. No
c. I don't know

I10. If **"Yes"** why?….....

I11.Is your religious leader approve of the use of modern family planning methods?
a. Yes
b. No
I12. Does religious leader talk about family planning?
a. Yes
b. No

I13. If **"Yes"** when?
a. .....
b. .....

I14. Are you involved in any religious groups?
a. Choir
b. Women groups
c. Elder's (group),
d. Bible/Koran study group
e. Prayer group,
f. Revival group
g. Evangelical work,
h. Islamic school/madrasa (teachers),
I. Other (specify).....
j. None.

I15.What religious activities have you done in the last month?
a. Choir
b. Women groups
c. Visiting the sick
d. Elder's meeting,
e. Bible/Koran study,
f. Prayer meeting,
g. Revival meeting
h. Evangelical work,
I. Islamic school/madrasa,
j. Other ….....
k. None.

I16. How do you consider yourself?
a. Very religious/spiritual person
b. Moderately religious/spiritual person
c.Slightly religious/spiritual person
d. Not religious/spiritual person
e. Don't know

SECTION J: PATRIARCHAL AND MATRIARCHALSOCIETIES
J1. How is the property inherited in your community?
a. Through the husband line
b. Through the respondent line
c. Other (specify).....

J2. In this community is there customary law on inheritance of widows?
a. Yes
b. No
c. Don't know

J3. The children are given names (descent/lineage)
a. Through the father's line
b. Through the mother's line
c. Other (specify).....

J4. In your tribe are there any beliefs related to fertility/childbearing in terms of number of children, sex etc?
a. Yes
b. No

J5. If the answer to question J4 above is **"Yes"** please explain
a. .....
b. .....

J6. Are there any methods commonly being practiced in recent past to control pregnancies other than modern contraceptive methods?
a. Yes
b. No

J7. If the answer to question J6 above is **"Yes"** list the methods
a. .....
b. .....
c. .....

J8. How is a woman viewed in your community if she uses modern contraceptives? Any taboos?
Explanation.....

J9. Is there preferences for a particular sex of child and why?
A. Yes
b. No

J10. If the answer to J9 above is **"Yes",** give the reasons to your answer
…….....

J11. Is divorce a common thing in this tribe?
a. Yes
b. No

J12. If a woman is divorced and she has children is it common for her to remarry and continue bearing children?
a. Yes
b. No

J13. If she is divorced is it common for her to have children outside wedlock?
a. Yes
b. No

J14. Nowadays what is the average age of a girl when she is considered to be ready for marriage? .....

J15. Give your views on question J14 above
….....
.....

THANK YOU FOR YOUR TIME

Appendix IV: Questionnaire for Married Men Aged 15-64 Years of Age

SECTION A: IDENTIFICATION

A1. Questionnaire number: .....
A2. Date: .....
A3. District: .....
A4. Ward: .....
A5. Village/street: .....
A6. Hamlet: .....
A7. Household name/No.....
A8. Interview date.....
A9.Interviewig person……

SECTION B: RESPONDENT CHARACTERISTICS
NB: Always circle the letter corresponding to the response except where stated otherwise.

B1. What is your age?.....(in complete years)

B2. In which tribe do you belong?.....

B3. Have you ever attended school?
a. Yes
b. No

B4. If **"Yes"** what was the highest level attended?
a. Incomplete primary school
b. Complete primary school
c. Incomplete secondary school
d. Complete secondary school
e. Higher than secondary school

B5. What is your marital status?
a. Married
c. Living together
g. Other (specify)……

B6. What type of union are you in
a. Monogamous
b. Polygamous
c. Others.....

B7. Who is the head of the household?
a. Respondent
b. Husband
c. Other (specify).....

C: MEN INFORMATION ON REPRODUCTION.
Now I would like to ask you about all the children you have had during your life.

C1. Do you have any children of your own?
a. Yes
b. No

C2. How many children of your own who are currently living together with you?
a. Daughters.....
b. Sons.....

C3. How many living children of your own are not staying with you?
a. Sons.....
b. Daughters.....

C4. **Sum totals of question C2 and C3 and enter total**
Total.....

C5. Of the children of your own how many have died? .....

C6. In all, how many children of your own have died?
a. Sons
b. Daughters

SECTION D: ATTITUDE TOWARDS FAMILY SIZE AND SEX PREFERENCE.
D1. If you could have a chance to have exactly a number of children that you always wanted, how many children would you have in total before completing your family size?.....

D2. If you could have only 3 children in total, which combination would you choose?
a. 3 girls
b. 1 boy and 2 girls
c. 2 boys and 1 girl
d. 3 boys

D3. Suppose the only choice you could have was 2 boys and 1 girl or 3 girls, which one would you prefer?
a. 2 boys and 1 girl
b. 3 girls

D4. Imagine that you have another alternative choice between 3 boys or 3 girls, which one would you, choose?
a. 3 boys
b. 3 girls

D5. Now suppose you have to choose only between either 3 boys or 2 girls and a boy, which set will be your choice?
a. 3 boys
b. 2 girls and a boy

D6. In case you could only choose one of the following combinations of children, which one could be your choice?
a. No children
b. 1 boy and 1 girl
c. 2 boys and 2 girls
d. 3 boys and 3 girls

D7. Suppose that you could only choose between having either no children or having 2 girls and 2 boys, which one could be your choice?
a. No children
b. 2 girls and 2 boys

D8. Imagine that you could only choose between having either 1 girl and 1 boy or having 3 girls and 3 boys, which combination would you choose?
a. 1 girl and 1 boy
b. 3 girls and 3 boys

D9. Finally, imagine that you could only choose between having one child or having 3 girls and 3 boys, which combination would you choose?
a. One boy child
b. One girl child
c. 3 girls and 3 boys

SECTION E: ATTITUDE TOWARDS CONTRACEPTIVE USE.
Now let us discuss about contraceptive use. There are many methods that can be used by both men and women to avoid the pregnancy.
NB: Circle (a) in E1-E13 for each method mentioned promptly. Then proceed down the column reading the name and description of each method not mentioned promptly. Circle (b) if respondent knows the method and (c) if not known. Then, for each method with (a) or (b) circle, continue with the next column before proceeding to the next method.

Method	Have you ever heard of (METHOD)?	Have you ever used (METHOD)?
E1.FEMALE STERILIZATION: Women can have an operation to avoid having any more children	a) Yes/promptly b) Yes/unpromptly c) No	a) Yes b) No c) Na
E2. MALE STERILIZATION: Men can have an operation to avoid having any more children	a) Yes/promptly b) Yes/unpromptly c) No	a) Yes b) No c) Na

E3. IUD: A woman can be inserted a small flexible device in her uterus to avoid the pregnancy	a) Yes/promptly b) Yes/unpromptly c) No	a) Yes b) No c) Na
E4. INJECTABLES: A woman receives injection to prevent pregnancy	a) Yes/promptly b) Yes/unpromptly c) No	a) Yes b) No c) Na
E5. IMPLANTS: Plastic capsules about a size of matchstick inserted under a skin of woman's upper arm to prevent a pregnancy.	a) Yes/promptly b) Yes/unpromptly c) No	a) Yes b) No c) Na
E6. PILLS: A woman may swallow a pill every day to avoid pregnancy	a) Yes/promptly b) Yes/unpromptly c) No	a) Yes b) No c) Na
E7. FEMALE CONDOM: Men can use a rubber sheath during sexual intercourse	a) Yes/promptly b) Yes/unpromptly c) No	a) Yes b) No c) Na
E8. DIAPHRAGM: Kind of pills or jelly that a woman put in her vagina before sexual intercourse to avoid conception.	a) Yes/promptly b) Yes/unpromptly c) No	a) Yes b) No c) Na
E9. RYTHIM: Couples can avoid having sexual intercourse on certain days of the month	a) Yes/promptly b) Yes/unpromptly c) No	a) Yes b) No c) Na
E10. WITHDRAWAL: Men can be careful and pull out before climax	a) Yes/promptly b) Yes/unpromptly c) No	a) Yes b) No c) Na
E11. Lactational Amenorrhea Method (LAM)	a) Yes/promptly b) Yes/unpromptly c) No	a) Yes b) No c) Na
E12. Other modern method ….....		a) Yes b) No c) Na
E13. Other traditional method ….....		a) Yes b) No c) Na

E14. Are you and your wife currently using any method of contraception?
a. Yes
b. No

E15. If **"Yes"** which method are you currently using?
a. Female sterilization
b. Male sterilization
c. IUD

d. Injectables
e. Implants
f. Pill
g. Female condom
h. Diaphragm
I. Rhythm
j. Withdrawal
k. Other modern
Method.....
l. Other traditional
method.....

E16. What are the reason(s) for the choice of this method?
.....
.....

E17. What are your views on other family planning methods?
.....
.....

NB: The following questions should be asked only to those who responded 'No' to allmethods in Q.E1-E13

E18. Have you ever used anything or tried to in any way to delay or avoid getting pregnant?
a. Yes
b. No
If **'Yes'** what method have you
used?.....

Correct question E1-E13

E19. If you have never used any method, what is the main reason for doing so?
a. Partner disapprove
b. Religious reasons
c. Fears about side effects
d. Health concerns
e. Lack information about use
f. Methods not available
g. Methods expensive
h. Want more children
I. Does not know any method
j. Methods reduce sexual pleasure
k. Partner will become unfaithful
l. Others
(specify).....

NB: The following questions should be asked only to those who responded 'Yes' to any of themethods in Q.E1-E13

E20. Do you intend to use or continue to use contraceptive in future?
a. Yes
b. No
c. Don't know

E21. If **"Yes"** how likely is it that you will use contraceptive in future?
a. Very unlikely
b. Unlikely
c. Uncertain
d. Likely
e. Very likely

E22. If **"No"** what is the main reason?
a. Partner disapprove
b. Religious reasons
c. Fears about side effects
d. Health concerns
e. Lack information about use
f. Methods not available
g. Methods expensive
h. Want more children
I. Does not know any method
j. Methods reduce sexual pleasure
k. Partner will become unfaithful
l. Others (specify).....

SECTION F: ATTITUDE TOWARDS COUPLES COMMUNICATION ON FAMILY PLANNING.
Now I would like to discuss with you on the husband and wife discussions about reproductive matters, family planning and number of children to have

F1. Have you ever talked with your wife about how many children a woman should have?
a. Yes
b. No

F2. In the past year have you and your wife discussed about family planning?
a. Yes
b. No

F3. If **"Yes"** how many times have you discussed with your wife?.....
F4. In the past one year have you and your wife discussed about using particular method to avoid pregnancy?
a. Yes
b. No

F5. If **"Yes"** what method did you discuss about?
a. Female sterilization
b. Male sterilization
c. IUD
d. Injectables
e. Implants
f. Pill
g. Female condom
h. Diaphragm
I. Rhythm
j. Withdrawal
k. Other modern Method.....
l. Other traditional method.....

NB: If the respondent fails to mention at least one method correct answer for Q.F2-F4 to "No"

F6. In the past one month have you and your wife discussed about using a particular method to avoid a pregnancy?
a. Yes
b. No

F7. If **"Yes"** how many times did you discuss about it?.....
F8. Which method did you discuss about?
a. Female sterilization
b. Male sterilization
c. IUD
d. Injectables
e. Implants
f. Pill
g. Female condom
h. Diaphragm
I. Rhythm
j. Withdrawal
k. Other modern Method.....
l. Other traditional method.....

F9. Who initiated the talk about family planning?
a. Husband
b. Wife

NB: If the respondent fails to mention at least one method correctly change answer for Q.F6 to "No"
Please for the following statements indicate (by putting a tick) whether you strongly agree, agree, uncertain, disagree or strongly disagree about husband and wife communication.

NB: TICK THE RESPONSES IN THE APPROPRIATE BOXES.

Statement	**Strongly agree**	**Agree**	**Uncertain**	**Disagree**	**Strongly disagree**
F10. Husband and wife should discuss about the number of children a woman should have					
F11. Husband and wife should make joint decisions about contraceptive use					
F12. Planning for a family is the responsibility of a husband					
F13. Communication between husband and wife should exclude family planning					
F14. Communication between husband and wife on postponing childbearing is not beneficial to the family					
F15. Is it important for the spouses to communicate with each other on matters of family planning					
F16. Husband and wife should discuss together if they want to delay childbearing					
F17. Men should be less involved in discussing about family planning with their wives					
F18. Communication between husband and wife about family planning should be encouraged					
F19. Husband and wife should never communicate about issues related to family planning					

F20. Do you approve or disapprove husband/wife communication on family planning?
a. Approve
b. Disapprove

SECTION G: COUPLES SOCIAL ECONOMIC STATUS AND HOUSEHOLD DECISION MAKING ON VARIOUS ISSUES

G1. How old was your wife on his last birthday?.....

G2. What is your main source of income?
a. Crop farming
b. Livestock keeping
c. Casual business
d. Casual labour
e. Employed
f. Others……..

G3.What is your occupation, that is, what kind of job do you mainly do?.....

G5. Who do you work for?
a. For family member
b. For someone else
c. Self-employed
d. Others.....

G6. Are you paid in cash or in kind for this work or you are not paid at all?
a. Cash only
b. Cash and kind
c. In kind only
d. Not paid

G7.Who usually decides how the money you earn will be used?
a. Respondent
b. Wife/partner
c. Respondent and husband/partner jointly
d. Other (specify).....

G8. Would you say that the money that you earn is?
a. More than him
b. Less than him
c. About the same
d. Wife/partner has no earning
e. Don't know

G9. Who usually decides how your (wife's/partner's) earnings will be used?
a. Respondent
b. Wife
c. Respondent and husband jointly
d. Wife has no earning
e. Other (specify).....

G10. Who usually make decision about health care for yourself?
a. Respondent
b. Wife/partner
c. Respondent and wife/partner jointly
d. Other.....

G11. Are you using any form of contraceptive?
a. Yes
b. No

G12. Who decide whether to use contraception or not?
a. Myself
b.Wife
c. Jointly

G13. Is your wife aware that you are using contraceptives?
a. Yes
b. No

G14. Is your wife using any form of contraceptives?
a. Yes
b. No

G15. Who decided on her use of that particular contraceptive?
a. Herself
b. Myself
c. Jointly

G16. Who usually make decisions about making major household purchases?
a. Respondent.
b. Wife/partner
c. Respondent and wife/partner jointly
d. Other.....

G17. Who usually make decisions about visits to your family or relatives?
a. Respondent
b. Wife/partner
c. Respondent and wife/partner jointly
d. Someone else.....

G18. Who own this house?
a. I own it
b. My wife own it
c. Both
d. Rented
e. Others.....

G19. Do you own any land?
a. Yes
b. No

G20.If the answer to question G19 above is **"Yes"** how do you own it?
a. Alone
b. Jointly
c. Others.....

Please for the following statements indicate whether you strongly agree, agree, uncertain, disagree or strongly disagree about whether a husband is justified on hitting or beating her wife in the given situations.

Q. No.	**STATEMENT**	**Strongly agree**	**Agree**	**Uncertain**	**Disagree**	**Strongly disagree**
G21	Husband should beat his wife if he found out that she uses contraceptives covertly.					
G22	Husband is not allowed to beat his wife if she goes out without telling him.					
G23	A woman should not be hit by her husband if she neglects the children					
G24	A woman deserves to be hit if she argues with her husband.					
G25	Husband should beat his wife if she refuses to have sex with him					
G26	Husband should not beat his wife if she burns the food.					

SECTION H: SOCIAL NETWORK

We all talk to others about important matters in our lives. I would like to ask you about whom you discuss your personal affairs or private concerns, such as children's illness, schooling, work, and church. They can live nearby or far away, and you might talk to them frequently or infrequently. The people other than your wife whose opinions are important to you.

H1. Can you please give me the names of 4 people whose opinions matter to you?

NAME	SEX		RELATIONSHIP*
	MALE	FEMALE	

* 1= Friend 2= mother 3= mother in law 4=sister 5=farther 6.brother 7= Pastor/Sheikh 8= Grandmother 9=Others.....

I would like now to ask you about the people other than your wife with whom you discuss contraception. These are people with whom you have discussed the costs and benefits of modern contraceptive methods, where they can be obtained, their side effects, and how the methods are used. These people can live nearby or far away, and you might talk to them frequently or infrequently.

H2.Other than your husband/partner, can you please tell me the people with whom you have discussedfamily planning in the last 12 months?

a.….....

b. ….....

c. ….....

d. ….....

H3. Has [Name] ever encouraged or discourage you to use a modern contraception to avoid or delay pregnancy?

NAME	RELATIONSHIP	RESPONSE	
		ENCOURAGE	DISCOURAGE
1			
2			
3			
4			

* 1= Friend 2= mother 3= mother in law 4=sister 5=farther 6.Brother 7= Pastor/Sheikh

8= Grandmother 9= Others.....

H4. Which method(s) did you chat about? **(Put a tick where appropriate).**

No.1	No.2	No.3	No.4	METHOD
				Female sterilization
				Male sterilization
				IUD
				Injectables
				Implants
				Pill
				Female condom

				Diaphragm
				Rhythm
				Withdrawal
				Other modern Method
				Other traditional Method

H5. Who initiated the discussion about Family Planning?
a. ….....
b. ….....
c. ….....
d. ….....

H6. Which family planning method is **(NAME)** using?

No.1	**No.2**	**No.3**	**No.4**	**METHOD**
				Female sterilization
				Male sterilization
				IUD
				Injectables
				Implants
				Pill
				Female condom
				Diaphragm
				Rhythm
				Withdrawal
				Other modern Method.....
				Other traditional Method.....

H7. How did you know that **(NAME)** is using modern contraceptive method?

NAME	**RESPONSE**
1	
2	
3	
4	

SECTION I: RELIGION AND RELIGIOUSITY

I1. What is your religious affiliation?
a. Moslem
b. Catholic
c. Protestant
d. Tradition
e. Others (specify).....

Now I would like to ask you some questions about your religiosity. Please answer "Yes" or "No" in every question and state frequency for relevant questions.

Question	**Yes**	**No**	**If yes how many times per week/yr**
I2. Do you believe in God			NA
I3. Do you fast			
I4. Do you go to the church/mosque			
I5. Do you pray			
I6. Do you give offering			

* 1=Never, 2=Once per week 3=More than once per week 4=Once per month 5=More than once per month 6=Once per year 7=More than once per year 8=Other (specify).....

I7. If **"No"** why?.....

I8.When was the last time you went to church (or mosque)?
a. In the last week
b. In the last month
c. Last 2-6 months
d. More than 6 months ago
e. Never

I9. Does your religion object in the use of contraceptives?
a. Yes
b. No
c. I don't know

I10. If **"Yes"** why?….....

I11.Is your religious leader approve of the use of modern family planning methods?
a. Yes
b. No

I12. Does religious leader talk about family planning?
a. Yes
b. No

I13. If **"Yes"** when?
a.....
b.....

I14. Are you involved in any religious groups?
a. Choir
b. Women groups
c. Elder's (group),
d. Bible/Koran study group
e. Prayer group,
f. Revival group
g. Evangelical work,
h. Islamic school/madrasa (teachers),
I. Other (specify).....
j. None.

I15.What religious activities have you done in the last month?
a. Choir
b. Women groups
c. Visiting the sick
d. Elder's meeting,
e. Bible/Koran study,
f. Prayer meeting,
g. Revival meeting
h. Evangelical work,
I. Islamic school/madrasa,
j. Other ….....
k. None.

I16. How do you consider yourself?
a. Very religious/spiritual person
b. Moderately religious/spiritual person
C.Slightly religious/spiritual person
d. Not religious/spiritual person
e. Don't know

SECTION J: PATRIARCHAL AND MATRIARCHALSOCIETIES
J1. How is the property inherited in your community?
a. Through the wife line
b. Through the respondent line
c. Other (specify).....

J2. In this community is there customary law on inheritance of widows?
a. Yes
b. No
c. Don't know

J3. The children are given names (descent/lineage)
a. Through the father's line
b. Through the mother's line
c. Other (specify).....

J4. In your tribe are there any beliefs related to fertility/childbearing in terms of number of children, sex etc?
a. Yes
b. No

J5. If the answer to question J4 above is **"Yes"** please explain
a.....
b.....

J6. Are there any methods commonly being practiced in recent past to control pregnancies other than modern contraceptive methods?
a. Yes
b. No

J7. If the answer to question J6 above is **"Yes"** list the methods
a.....
b.....
c.....

J8. How is a woman viewed in your community if she uses modern contraceptives? Any taboos?
Explanation.....

J9. Is there preferences for a particular sex of child and why?
a. Yes
b. No

J10. If the answer to J9 above is **"Yes",** give the reasons to your answer
….....

J11. Is divorce a common thing in this tribe?
a. Yes
b. No

J12. If a woman is divorced and she has children is it common for her to remarry and continue bearing children?
a. Yes
b. No

J13. If she is divorced is it common for her to have children outside wedlock?
a. Yes
b. No

J14. Nowadays what is the average age of a girl when she is considered to be ready for marriage?.....

J15. Give your views on question J14 above……..

THANK YOU FOR YOUR TIME

Appendix V: Check List for Focus Group Discussion

1. Attitudes towards family size

It is said that some women/men are interested in a certain number of children as a limit for couples to bear in their life time.

a) What are your views on this aspect?
b) What is the exact number of children that women find it to be ideal?
c) What are the reasons for that choice?

2. Attitudes towards husband and wife communication on family planning

Do normally couples in this community discuss about child bearing?
Do they discuss about child spacing and delaying births?
Do they also discuss about specific methods of delaying or postponing births
For those who do not discuss, what are their main reasons for not doing so?

3. Attitudes towards contraceptive use

- In general what are the attitudes of couples towards contraceptive use?
- Under what conditions do couples feel they should use or not use contraceptives?
- Why do some couples prefer not to use contraceptives?
- In your community, how is the woman viewed if she uses modern contraceptives? Is there any taboos?
- Are you aware of any traditional contraceptive methods which have been used by men or women in this community?

4. Socio networks

- Do you normally have a tendency to discuss about reproductive issues with people other than your husbands/wives?

- When do you normally discuss about reproductive issues
- Are all social network members able to tell whether contraceptives they use or have been using are affecting them?
- What are other people opinions on the use of contraceptives?

5. Patriarchal and Matriarchal societies

- How are the children given names in your community? What is your view on this?
- How are property inherited in your community? What is your view on this?
- In this community, is there customary Law on inheritance of widows? What is your view on this?
- Is divorce common in this community?
- Is a divorced woman allowed to remarry or to have children outside wedlock?

6. Attitudes towards decision making on various issues in the household

In most African households husbands have power to control and make decisions on various issues in the household like, spending of money, whether his wife should visit friends and relatives or not, whether she should use contraceptives or not etc. or to beat his wife?

- What is your opinion in general regarding this issue?
- Should your husband/wife decide on the use of the money you have earned?
- Do husbands/wives normally decide whether their wives/husbands should or should not visit friends and relatives? Give your opinion on this.
- Do husbands/wives normally decide on the health care of their wives/husbands? What is your opinion on this?
- Is it a common practice in this village for husbands/wives to beat their wives/husbands? What is your opinion on this?

THE END

Appendix VI: Key Informat Interview Guide

1. Attitudes towards family size

It is said that some women/men are interested in a certain number of children as a limit for couples to bear in their life time.

d) What are your views on this aspect?
e) What is the exact number of children that women find it to be ideal?
f) What are the reasons for that choice?

2. Attitudes towards husband and wife communication on family planning

Do normally couples in this community discuss about child bearing and child spacing?

Do they also discuss about specific methods of delaying or postponing births

For those who do not discuss, what are their main reasons for not doing so?

3. Attitudes towards contraceptive use

- In general what are the attitudes of couples towards contraceptive use?
- Under what conditions do couples feel they should use or not use contraceptives?
- Why do some couples prefer not to use contraceptives?
- In your community, how is the woman viewed if she uses modern contraceptives? Is there any taboos?
- Are you aware of any traditional contraceptive methods which have been used by men or women in this community?

4. Socio networks

- Do couples in this area have a tendency to discuss about reproductive issues with people other than their spouses? What is your opinion regarding this tendency?

6. Attitudes towards decision making on various issues in the household

In most African households husbands have power to control and make decisions on various issues in the household like, spending of money, whether his wife should visit friends and relatives or not, whether she should use contraceptives or not etc. or to beat his wife?

- What is your opinion in general regarding this issue?
- Do couples normally decide on the health care of their spouse? What is your opinion on this?
- Is it a common practice in this village for husbands/wives to beat their spouses? What is your opinion on this?

THE END

Appendix VII: Logistic Regression Results

Appendix VIIa: Logistic Regression Results for Women Social Networks

1. Respondent social network member who opinion matters other than her husband and Intention to use contraceptives in the future

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	148.552[a]	.061	.095

a. Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.

Classification Table[a]

	Observed		Predicted		
			Whether respondent is intending to use contraceptives in future		Percentage Correct
			No	Yes	
Step 1	Whether respondent is intending to use contraceptives in future	No	0	32	.0
		Yes	1	123	99.2
	Overall Percentage				78.8

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	OPMATTA1	.980	.434	5.102	1	.024	2.663
	OPMATTA2	.817	.431	3.591	1	.058	2.263
	OPMATTA3	-.270	.464	.338	1	.561	.763
	OPMATTA4	.413	.429	.927	1	.336	1.512
	Constant	-1.881	1.284	2.147	1	.143	.152

a. Variable(s) entered on step 1: OPMATTA1, OPMATTA2, OPMATTA3, OPMATTA4.

2. Respondent discussion about FP with social network member and Intention to use contraceptives in the future

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	285.373[a]	.041	.062

a. Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.

Classification Table[a]

	Observed		Predicted		
			Whether respondent is intending to use contraceptives in future		Percentage Correct
			No	Yes	
Step 1	Whether respondent is intending to use contraceptives in future	No	0	62	.0
		Yes	0	220	100.0
	Overall Percentage				78.0

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	DISCFP1	-1.504	.553	7.404	1	.007	.222
	DISCFP2	.671	.752	.796	1	.372	1.957
	DISCFP3	.738	.796	.858	1	.354	2.091
	DISCFP4	-.492	.703	.491	1	.483	.611
	Constant	2.092	.803	6.790	1	.009	8.100

a. Variable(s) entered on step 1: DISCFP1, DISCFP2, DISCFP3, DISCFP4.

3. Encouragement from social network member on the use of contraceptives and Intention to use contraceptives in the future

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	281.084[a]	.035	.054

a. Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.

Classification Table[a]

	Observed		Predicted		
			Whether respondent is intending to use contraceptives in future		Percentage Correct
			No	Yes	
Step 1	Whether respondent is intending to use contraceptives in future	No	0	60	.0
		Yes	0	220	100.0
	Overall Percentage				78.6

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	ENC1ST	1.285	.485	7.017	1	.008	3.615
	ENC2ND	-.403	.683	.347	1	.556	.668
	ENC3RD	-.625	.821	.580	1	.446	.535
	ENC4TH	.187	.703	.071	1	.790	1.206
	Constant	.973	.186	27.387	1	.000	2.645

a. Variable(s) entered on step 1: ENC1ST, ENC2ND, ENC3RD, ENC4TH.

4. Method used by social network member and Intention to use contraceptives in the future

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	20.789[a]	.278	.492

a. Estimation terminated at iteration number 7 because parameter estimates changed by less than .001.

Classification Table[a]

	Observed		Predicted		
			Whether respondent is intending to use contraceptives in future		Percentage Correct
			No	Yes	
Step 1	Whether respondent is intending to use contraceptives in future	No	3	3	50.0
		Yes	3	32	91.4
	Overall Percentage				85.4

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	METHUSE1	.185	.365	.256	1	.613	1.203
	METHUSE2	-.111	.412	.073	1	.787	.895
	METHUSE3	-1.173	.614	3.650	1	.056	.309
	METHUSE4	-1.156	.590	3.842	1	.005	.315
	Constant	13.987	5.996	5.442	1	.020	1187437.192

a. Variable(s) entered on step 1: METHUSE1, METHUSE2, METHUSE3, METHUSE4.

5. Method used by social network member and Current contraceptive use

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	53.815[a]	.122	.164

a. Estimation terminated at iteration number 4 because parameter estimates changed by less than .001.

Classification Table[a]

	Observed		Predicted		
			Whether respondent is currently using any form of contraception		Percentage Correct
			No	Yes	
Step 1	Whether respondent is currently using any form of contraception	No	8	10	44.4
		Yes	2	24	92.3
	Overall Percentage				72.7

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	METHUSE1	-.329	.223	2.168	1	.141	.720
	METHUSE2	.041	.209	.038	1	.846	1.041
	METHUSE3	.243	.253	.924	1	.336	1.275
	METHUSE4	.477	.228	4.362	1	.037	1.611
	Constant	-1.701	1.774	.919	1	.338	.182

a. Variable(s) entered on step 1: METHUSE1, METHUSE2, METHUSE3, METHUSE4.

Appendix VII: Logistic Regression Results

Appendix VIIb: Logistic Regression Results for Men Social Networks

1. Encouragement from social network member on the use of contraceptives and current use of contraceptives

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	333.953[a]	.065	.090

a. Estimation terminated at iteration number 4 because parameter estimates changed by less than .001.

Classification Table[a]

	Observed		Predicted		
			Whether respondent is currently using any form of contraception		Percentage Correct
			No	Yes	
Step 1	Whether respondent is currently using any form of contraception	No	0	94	.0
		Yes	0	180	100.0
	Overall Percentage				65.7

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	ENCRG1ST	1.239	.493	6.317	1	.012	3.452
	ENCRG2ND	.052	.673	.006	1	.939	1.053
	ENCRG3RD	.319	.806	.157	1	.692	1.376
	ENCRG4TH	-.534	.548	.949	1	.330	.586
	Constant	.319	.148	4.674	1	.031	1.376

a. Variable(s) entered on step 1: ENCRG1ST, ENCRG2ND, ENCRG3RD, ENCRG4TH.

2. **Method discussed with social network members and family size**

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	20.296[a]	.333	.498

a. Estimation terminated at iteration number 7 because parameter estimates changed by less than .001.

Classification Table[a]

	Observed		Predicted		
			Respondent total number of children he has		Percentage Correct
			More than 4	1-4	
Step 1	Respondent total number of children he has	More than 4	4	3	57.1
		1-4	1	21	95.5
	Overall Percentage				86.2

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	MEDISC1	-.513	.367	1.946	1	.163	.599
	MEDISC2	1.400	.621	5.086	1	.024	4.057
	MEDISC3	-.121	.242	.248	1	.618	.886
	MEDISC4	.145	.160	.819	1	.365	1.156
	Constant	-2.457	2.019	1.481	1	.224	.086

a. Variable(s) entered on step 1: MEDISC1, MEDISC2, MEDISC3, MEDISC4.

Appendix VIIc: Logistic Regression Results for Women Ownership of Property

1. Women property ownership and intention to use contraceptives in the future

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	283.953[a]	.047	.072

a. Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.

Classification Table[a]

	Observed		Predicted		
			Whether respondent is intending to use contraceptives in future		Percentage Correct
			No	Yes	
Step 1	Whether respondent is intending to use contraceptives in future	No	0	62	.0
		Yes	0	221	100.0
	Overall Percentage				78.1

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	OWHOUSE	.710	.206	11.862	1	.001	2.034
	OWLAND	-.026	.300	.007	1	.932	.975
	Constant	-.562	.687	.669	1	.413	.570

a. Variable(s) entered on step 1: OWHOUSE, OWLAND.

2. Women property ownership and family size

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	360.477[a]	.019	.027

a. Estimation terminated at iteration number 4 because parameter estimates changed by less than .001.

Classification Table[a]

	Observed		Predicted		
			Respondent total number of children she has		Percentage Correct
			More than four	1-4	
Step 1	Respondent total number of children she has	More than four	200	0	100.0
		1-4	93	0	.0
	Overall Percentage				68.3

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	OWHOUSE	-.353	.160	4.854	1	.028	.703
	OWLAND	-.175	.260	.454	1	.500	.839
	Constant	.442	.568	.606	1	.436	1.556

a. Variable(s) entered on step 1: OWHOUSE, OWLAND.

Appendix VIId: Logistic Regression Results for Men Ownership of Property

1. Men property ownership and Family Size

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	381.687[a]	.039	.053

a. Estimation terminated at iteration number 4 because parameter estimates changed by less than .001.

Classification Table[a]

	Observed		Predicted		
			Respondent total number of children he has		Percentage Correct
			Mor than 4	1-4	
Step 1	Respondent total number of children he has	Mor than 4	0	116	.0
		1-4	0	177	100.0
	Overall Percentage				60.4

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	OWHOUSE	.189	.105	3.240	1	.072	1.208
	OWLAND	.820	.397	4.270	1	.039	2.269
	Constant	-.923	.453	4.159	1	.041	.397

a. Variable(s) entered on step 1: OWHOUSE, OWLAND.

Appendix VIIe: Logistic Regression Results for Men Employment

1. Men employment and current use of contraceptives

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	369.475[a]	.027	.037

a. Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.

Classification Table[a]

Observed			Predicted		
			Whether respondent is currently using any form of contraception		Percentage Correct
			No	Yes	
Step 1	Whether respondent is currently using any form of contraception	No	4	97	4.0
		Yes	2	190	99.0
	Overall Percentage				66.2

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	EMAGRIC	-2.773	1.369	4.100	1	.043	.063
	CASLABOUR	-1.963	1.464	1.799	1	.180	.140
	EMPLOYED	-1.270	.876	2.102	1	.147	.281
	Constant	3.349	1.376	5.929	1	.015	28.484

a. Variable(s) entered on step 1: EMAGRIC, CASLABOUR, EMPLOYED.

Appendix VIIf: Logistic Regression Results for Women Ethnicity

1. Women ethnicity and current use of contraceptives

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	376.817[a]	.065	.088

a. Estimation terminated at iteration number 4 because parameter estimates changed by less than .001.

Classification Table[a]

Observed			Predicted		
			Whether respondent is currently using any form of contraception		Percentage Correct
			No	Yes	
Step 1	Whether respondent is currently using any form of contraception	No	63	57	52.5
		Yes	54	119	68.8
	Overall Percentage				62.1

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	SUKUMA	-1.022	.319	10.232	1	.001	.360
	LUGURU	.049	.394	.015	1	.901	1.050
	NGUU	.742	.817	.825	1	.364	2.100
	ZIGUA	-.813	.419	3.764	1	.052	.443
	Constant	.868	.260	11.129	1	.001	2.381

a. Variable(s) entered on step 1: SUKUMA, LUGURU, NGUU, ZIGUA.